

September

NATION'S

1943

BUSINESS



I'VE GOT 36 SECONDS...

It's queer, up here . . .

Falling, through space, time runs out quick and your mind does tricks.

One second I'm gripping my gun while shrapnel snarls in my face, and the next—I'm back home in bed and Mom's calling, "Wake up, wake up, you sleepy head!"

It's queer, up here . . .

One second the earth and the enemy come rushing up, and the next—it's that day in September when Joe Clark caught me climbing his apple tree and a dead branch broke and I fell.

It's queer, up here . . .

But as time flows past and hell slides nearer, I can see things clearer. And with only 36 seconds to go, I know what I didn't before...

I'm not just a kid anymore. I know why I'm fighting this war!

I'm fighting this war for my right to live like a man, to work like a man, to think like a man—not to be herded around and driven like a sheep to the grazing ground.

I'm fighting this war for my right to be let

alone . . . to do what I've always dreamed of doing in a land where my future's my own.

I'm fighting for the right to come home again to simple things . . . like taking my girl to a movie . . . or seeing a baseball game . . . or going to church . . . or driving my car to work.

I'm fighting for the America my folks and I have always known . . . where each year has always brought us new and better things . . . where there's opportunity for all . . . and it's every man's right to rise, and go ahead on his own!

That's what I'm fighting for. Keep it that way until I come back!

Here at Nash-Kelvinator, we're building 2,000 h.p. Pratt & Whitney engines for Navy Vought Corsair fighters . . . making intricate Hamilton Standard propellers . . . readying our production lines to build Sikorsky helicopters for the Army Air Forces . . . working to hurry the day when our boys can come home.

NASH-KELVINATOR CORPORATION

Kenosha • Milwaukee • DETROIT • Grand Rapids • Lansing

Enlist Now! Back the Attack — With War Bonds. Third War Loan Drive.



NASH

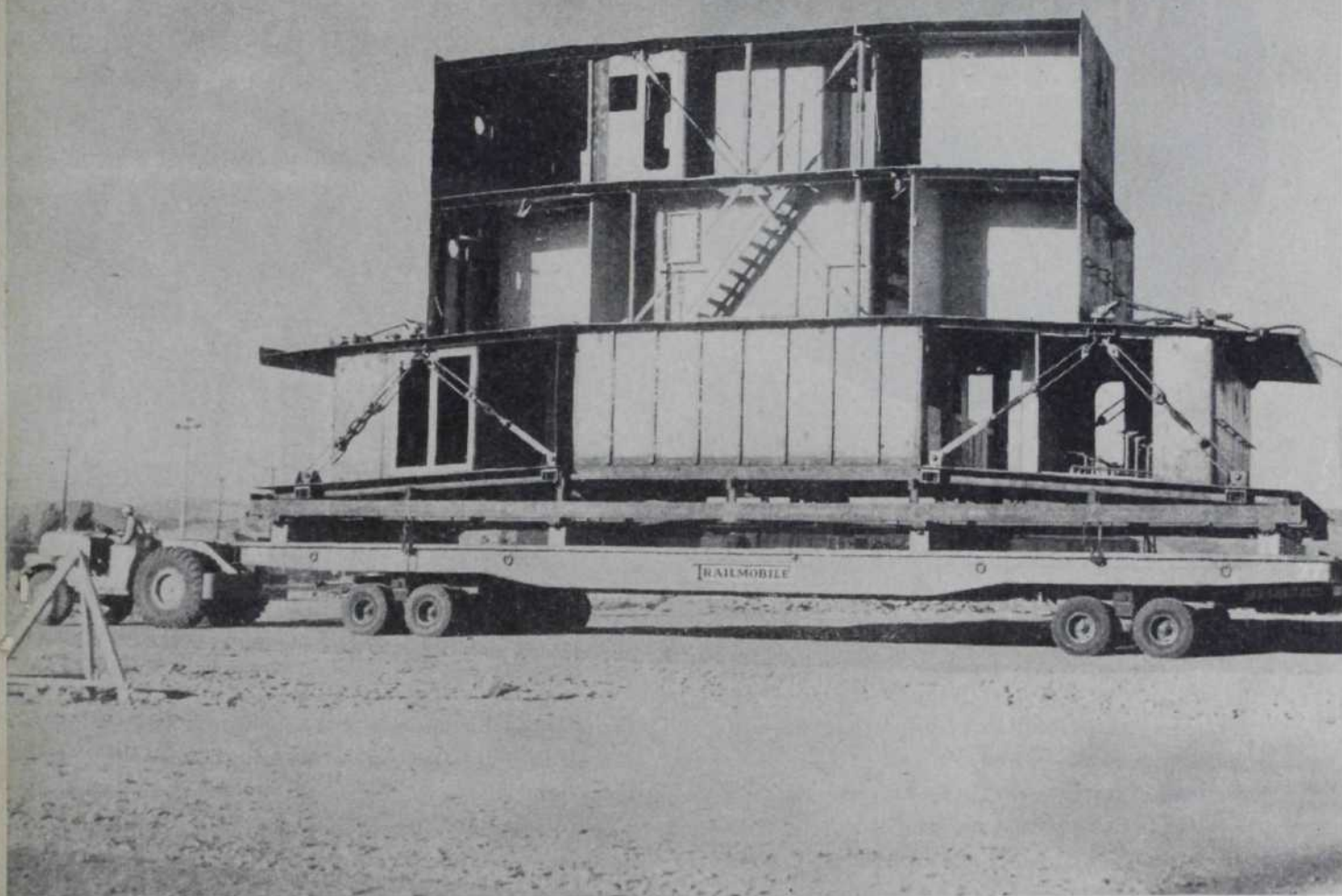
AUTOMOBILES



KELVINATOR

REFRIGERATORS • ELECTRIC RANGES •





How They Deliver Victory Ships in 150-Ton Slices!

A typical example of B. F. Goodrich leadership in tires

YOU'VE seen some pretty big war loads on our highways lately. But did you ever see one like this? High as a house, heavy as a locomotive, it's a prefabricated segment of a Victory Ship on its way to the sea.

Just look at that driver! He's dwarfed almost beyond recognition by the pile of steel at his back. And look at that trailer! It's as long as a railroad flat car. Yet trailer and 150-ton load roll smoothly and safely along—on B. F. Goodrich Speedliner Silvertowns!

Ever since Pearl Harbor these sturdy, reliable Speedliners have been delivering the goods under the most grueling conditions ever faced by man or machine. At 50 below and in hub-deep

mud they helped build the Alaskan Highway. Under blazing desert skies and in sand that cuts like steel filings they brought up the men and munitions that pushed Rommel out of Africa.

As for everyday jobs—they're doing them, too. Up and down the land Speedliner Silvertowns are setting amazing new mileage records on all types of trucking operations. And while you may never have to move ship sections or fight your way through mud and sand, it's certainly reassuring to have such mighty reserves of

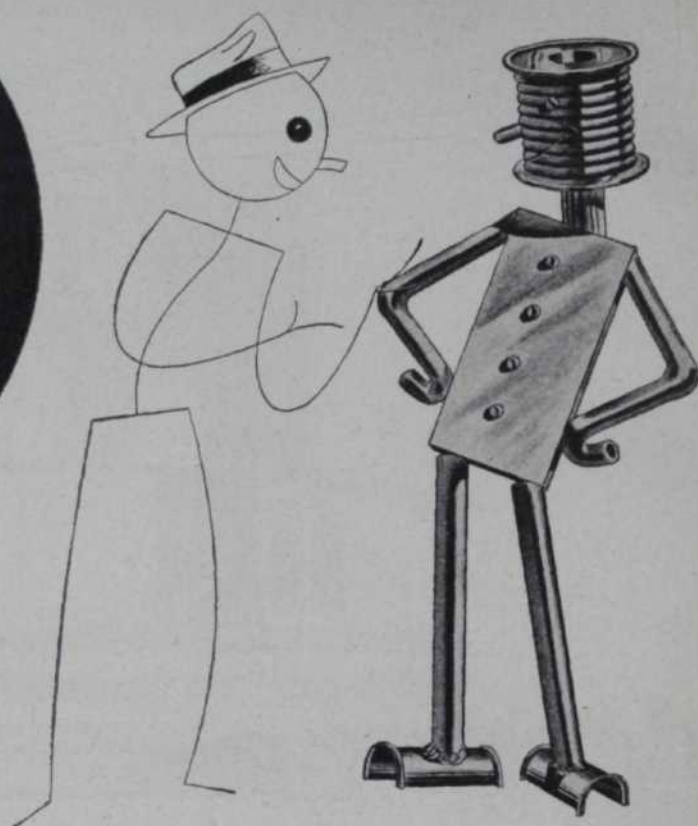
strength and durability at your service.

Remember the leadership of B. F. Goodrich when next you buy truck tires. And remember to see your B. F. Goodrich dealer first.



WE HAVE
THIS TO SAY
ABOUT

Lead



We urge you to look carefully at lead. It has performed some remarkable feats.

In glass, lead is transparent, invisible. In paints, lead as the pigment is opaque and colorful. In architecture, lead outlives the rise and fall of empires. In industry, it ignores the consuming fury of sulfuric acid. In science, it slaps back the stabbing rays of radium.

In any discussion of materials, lead carries weight!

But what of lead in the future? Versatile as lead has been, has it done all that it is capable of doing?

It is not as a metallic rival, with tongue in cheek, that we gesture toward the nether pole of specific gravity and ask whether you are earnestly thinking up more ways to use lead after the war.

It is as a sincere, practical-minded Imagineer. We hope—as one Imagineer to another.

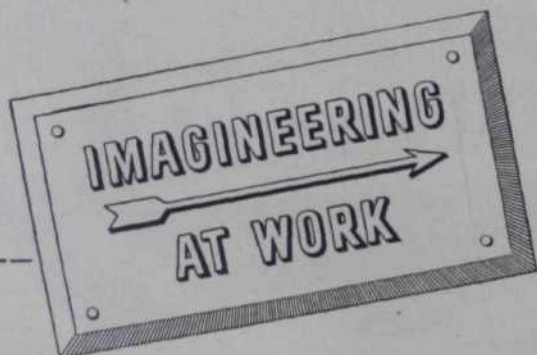
It would be the wildest fancy to dream that wartime developments of any one material could solve postwar

economic problems—much as we would like to picture our stronger, more versatile, more plentiful Alcoa Aluminum Alloys in the part.

We are imagineering—not daydreaming. We believe the more new uses Imagineers can think up for old materials, to make new things to sell, and, the more new materials Imagineers can apply to old uses, to make familiar things more salable—then the better off we'll all be.

In your Imagineering, you will certainly come face to face with the greater possibilities in Alcoa Aluminum. They alone are not enough to create the payrolls to keep fifty-five million workers in their buying roles—but they are a very encouraging field to imagineer in. Alcoa offers so much in lower costs, greater strengths and increased applications that engineering gets a shot of imagination. That starts *Imagineering!*

ALUMINUM COMPANY OF AMERICA, 2125 Gulf Building, Pittsburgh, Pennsylvania.



Alcoa Aluminum





If you hear the operator say that, it means that the line you want is crowded and other calls are waiting. . . . We're sure you'll understand and co-operate cheerfully—in the interests of better wartime telephone service for *everybody*.



BELL TELEPHONE SYSTEM



speaking of the housing shortage

This family is lucky . . . their housing problem can be solved without undue strain on critical materials.

• • •

But you might not be so fortunate. If your house were seriously damaged by fire, you might not be able to make repairs until after the war. So don't risk fires. Keep your basement and attic clear of inflammable materials.

• • •

Also—to protect the dollar investment in your home—make sure you are carrying fire insurance to the full present-day value of your property. If you are in doubt as to whether your policies meet this standard, talk it

over with a reliable local agent or broker such as those who represent the Aetna Fire Group. Your present policies can be brought up-to-date in a few minutes—and it might mean saving you thousands of dollars.

• • •

And speaking of dollar safety, do you know that insurance with a capital stock company such as those comprising the Aetna Fire Group is backed by both a paid-in capital and surplus? You are never liable for assessment.

• • •

**Don't Guess About Insurance
—CONSULT YOUR LOCAL
AGENT OR BROKER**

Since 1849 through conflagrations, wars and financial depressions, no policyholder has ever suffered loss because of failure of the Aetna to meet its obligations.

WARS	CONFLAGRATIONS	DEPRESSIONS
1846	1835—New York City	1819
Mexican War	1845—New York City	1837
1861	1851—San Francisco	
Civil War	1866—Portland, Me.	1843
1898	1871—Chicago	1857
Spanish-American War	1872—Boston	
1917	1877—St. John, N. B.	1873
World War I	1889—Seattle; Spokane	1893
1941	1901—Jacksonville, Fla.	
World War 2	1904—Baltimore	1907
	1906—San Francisco	1921
	1908—Chelsea	1929
	1914—Salem	
	1941—Fall River	



The Aetna Fire Group

HARTFORD, CONNECTICUT

Aetna Insurance Co. • The World Fire & Marine Insurance Co. • The Century Indemnity Co. • Piedmont Fire Insurance Co. • Standard Insurance Co. of N. Y. • Standard Surety & Casualty Co. of N. Y.



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Cover photograph, by Ewing Galloway, symbolizes government's drive to enlist women in essential work. "Women War Workers" insignia, lower left, has been adopted officially for the drive.

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As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

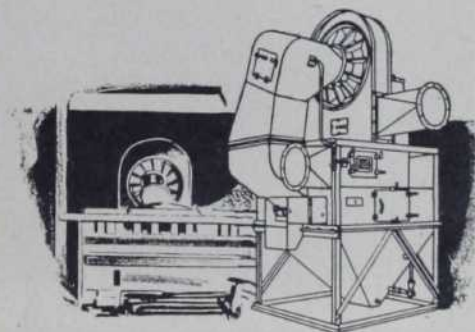
Although the editors will make every effort to return unsolicited manuscripts promptly and in good condition, Nation's Business cannot accept responsibility for loss or damage of this material.

A Complete DUST CONTROL SERVICE

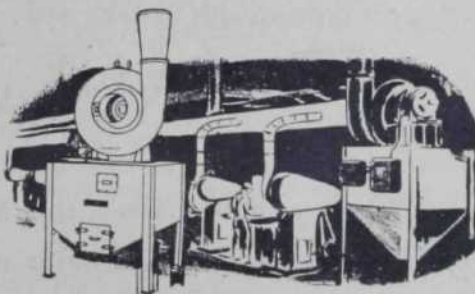
for all
Industry



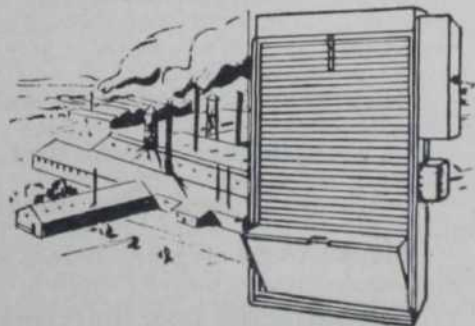
Pioneers in the development of the science of Dust Engineering—the American Air Filter Company is today the world's foremost manufacturer of atmospheric and process dust control equipment. Send for "AAF In Industry"—which describes the complete AAF line.



Type W Roto-Clone wet precipitator for process dust. Ask for Bulletin 274.



Type D Roto-Clone dry process dust precipitator. Ask for Bulletin 272.

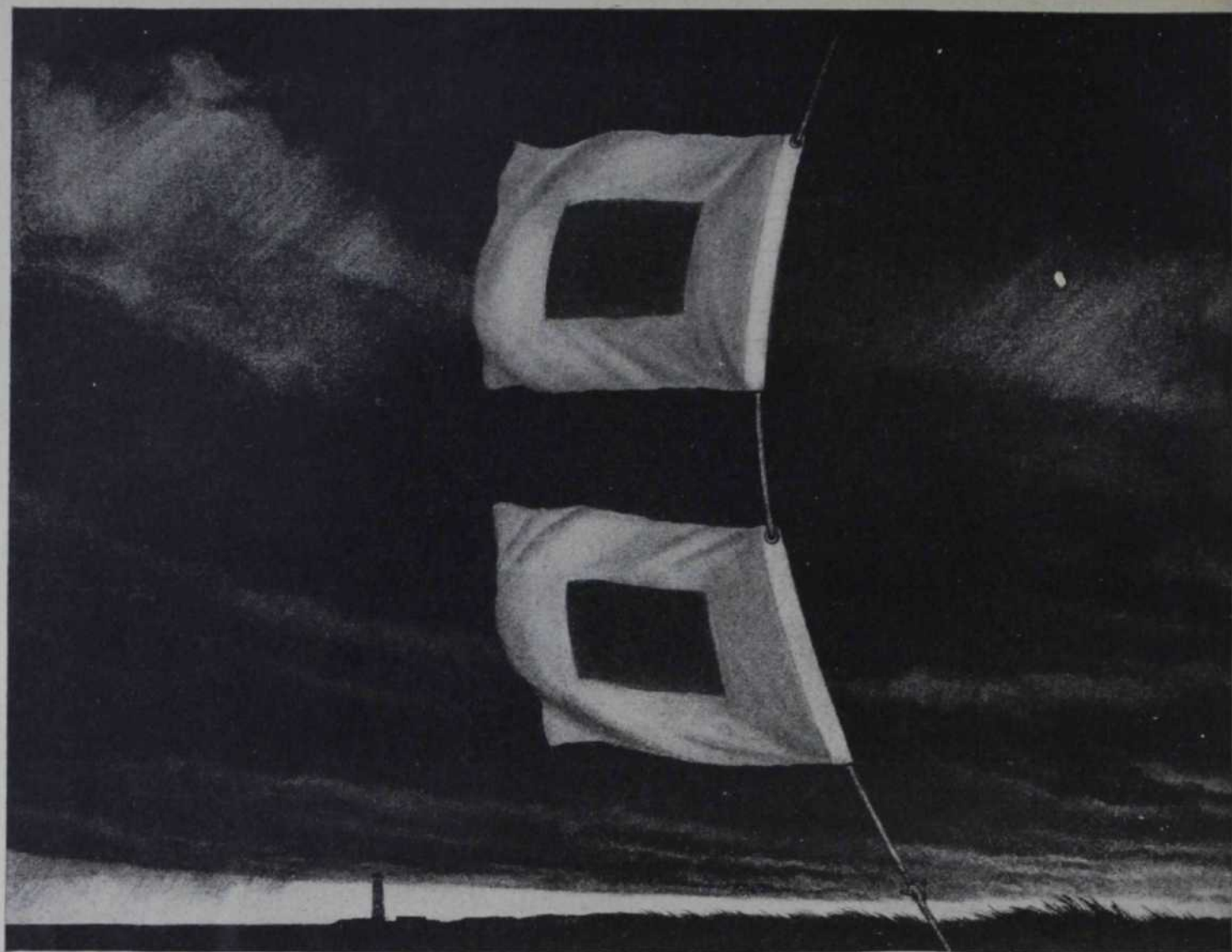


AAF Automatic Air Filter for atmospheric dusts. Ask for Bulletin 241A.

AMERICAN AIR FILTER CO., INC.

109 Central Ave., Louisville, Ky.

In Canada, Darling Bros., Ltd., Montreal



The old fashioned hurricane is too slow!

When a gale passes the hundred-mile-an-hour mark and graduates into a hurricane, the standard anemometer (that whirling gadget that measures its speed) begins going crazy.

Imagine a wind with six times the force of a hurricane, a wind that would shatter a brick wall! And then imagine chilling that breeze to 67 degrees below zero!

That is the task that York has undertaken

in the construction of the Army's huge new wind tunnel at Wright Field. When the job is completed, 2250 horse power will work for 20 hours storing up enough "cold" to put this sub-arctic chill on four million cubic feet of air per minute for one hour of testing.

Planes that can stand up under this sort of testing will pass that chill along to the Axis. York Corporation, York, Penna.



YORK REFRIGERATION AND AIR CONDITIONING FOR WAR

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

NATION'S BUSINESS for September, 1943



SOLUTION—

"Snubbers" prevent engine exhaust noise

In Oklahoma it is not uncommon to find pump engines or even drilling rigs in front yards or in the middle of victory gardens. Oil is the lifeblood of a large part of Oklahoma, and property owners are wise to take it where they find it. You can't move an oil well, yet oil sometimes shows up in rather inconvenient locations.

Just because you have engines driving pumps, however, does not mean that you must put up with exhaust noise. Engines equipped with Burgess Exhaust Snubbers make quiet neighbors. Where old-style "mufflers" subdued undesirable noise, Snubbers prevent it. They are constructed on the snubbing principle, originated by Burgess acoustic engineers.

BURGESS PIONEERING in acoustic development has provided many other quieting devices to help in both war and peace. Over 20 years' experience has made it possible for the Acoustic Division to successfully engineer products ranging from acoustic telephone booths to ventilating duct linings. Why not write us of your noise difficulties? Acoustic Division engineers may already have worked out the solution to your problem.

BURGESS
Acoustic
DIVISION

Acoustic Division, Burgess Battery Company
2817-P West Roscoe Street, Chicago 18, Illinois



NATION'S BUSINESS for September, 1943

Through the Editor's Specs

Footnote to Sicily

DON'T FORGET, as we boot Mussolini around today, everyone—almost—was applauding him in the '20's because he made the trains run on time. The writer brought back to the readers of this magazine a personal message from the Duce. Mussolini asked that we tell Americans of Italy's "new spirit" and his emphasis upon "discipline, order and obedience."

We did that. But we also quoted another message from Gaetano Salvemini, a former member of the Italian Chamber of Deputies, whom Mussolini threw into jail because he differed politically with the Duce. Salvemini said:

Casual visitors in Italy, in the presence of a great moral tragedy, find that the trains run on time and thank God for Mussolini. They do not ask themselves if justice also runs on time, if liberty also runs on time, if human dignity runs on time. Justice, liberty, the guaranty of human dignity; these are also public services of civilized countries. Perhaps a casual visitor who pays attention only to the punctual arrival of trains thinks that the Italian people is so degraded that it is not worthy of having good public service of a moral nature. Or else, he himself is so degraded as to be able to appreciate only public service of a material nature.

The message of Salvemini is still tops with this magazine.

Old-fashioned political hokum

VICE-PRESIDENT Wallace leaps to the hustings and darkly announces the presence in our midst of certain unnamed "corporation fascists" who, he says, are planning dire things. All right, Henry, you give us the names; we'll look up the street addresses and go to work. We're ready with our blunderbuss—we hear you now prefer it to the boomerang.

You never know

THIS IS a good place to interrupt our heavy thinking and devote a mite of attention to human nature and mirrors. In all the better washrooms we know anything about, every wash basin has its mirror. They are as inseparable as Siamese twins, or a man and his dog, or Sherlock Holmes and Watson, or the

British and tea. So, if we had been putting the fixtures into washrooms hastily built in expanded war industries, we would have done precisely what industry has done, namely, put a mirror over every wash-basin.

But we've learned something, and so has factory management. With plants full of women workers, innovations are called for. An automobile factory has discovered that mirrors over the wash-basins in the women's powder rooms are bottlenecks. The company's woman counselor, according to the Automotive Council for War Production, ordered the mirrors moved away from the basins to the opposite wall. Because, she told the maintenance foreman, women spend more time primping than washing their hands. The foreman yielded to her superior judgment because, he said, he wouldn't know; he'd never been in a powder room.

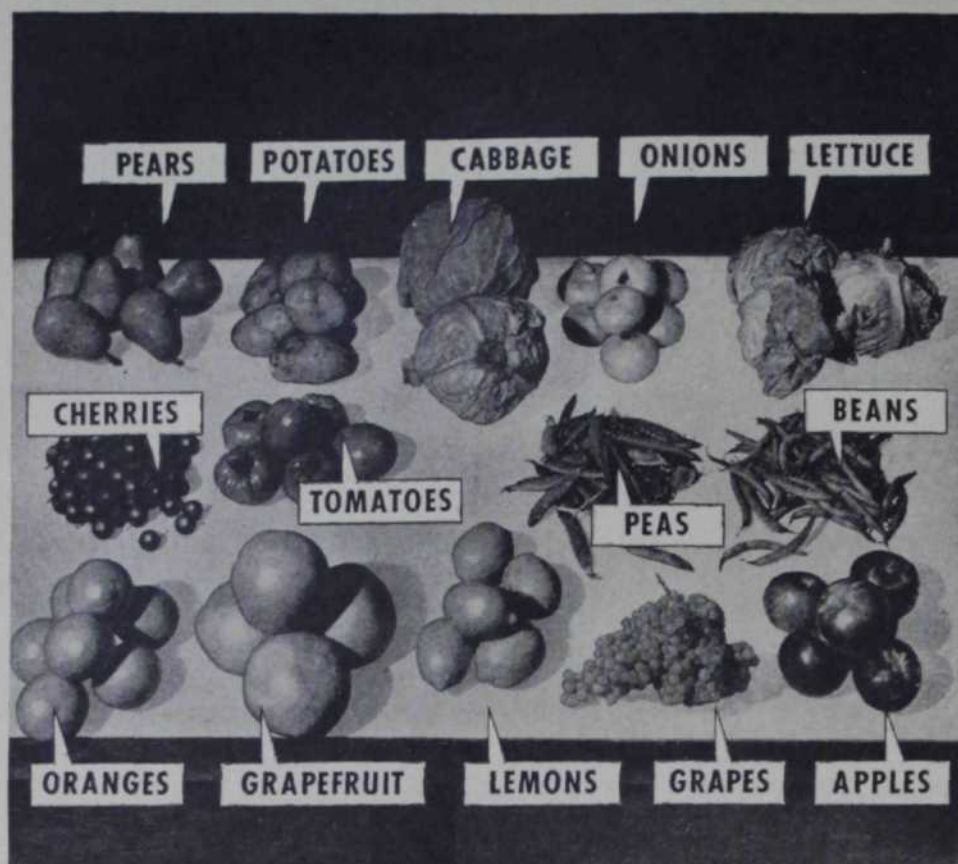
We see by the communiques

THERE IS a distinct note of optimism in the news from Washington's Semantics front. Inch by inch, Government's experts and lawyers are hacking their way through the steaming jungles of the English language. Fresh supplies of dictionaries and semi-colons are being rushed up. The goal is to make the Government's edicts and directives intelligible to the citizenry before the war's over.

ITEM: OPA's six-page, fine-print directive on fruit cakes has been amended. The amendment: "All commodities listed in Appendix A are those known to the trade as such excepting therefrom such thereof, if any, while subject to another regulation." OPA amends the amendment by explaining it is designed to end confusion caused by the fact that, previously, fruit cake sales were governed by three separate regulations. Simple.

ITEM: Add to your list of new federal activities the "Data-Analysis group of the Aptitude Test sub-unit of the Worker Analysis Section of the Division of Occupational Analysis and Manning Tables of the Bureau of Labor Utilization of the Manpower Commission."

ITEM: The Office of War Information announces that the OPA announces that nation-wide distribution of War



EXTRA FOOD COUPONS FOR YOU, MADAM .. COMPLIMENTS OF AMERICAN RAILROADS

THANKS to American railroads, you can leave your food ration coupons at home when you go shopping for fresh fruits and vegetables.

Oranges, lemons, grapefruit, melons, cherries, berries, and many other fruits do not require precious ration points.

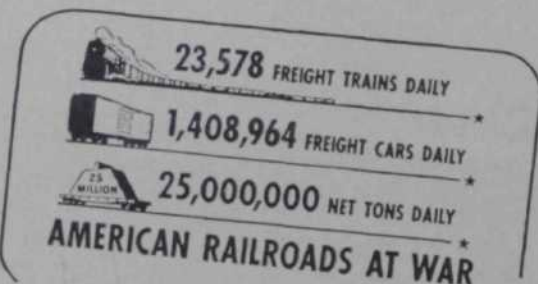
Potatoes, tomatoes, green beans, peas, cabbage, lettuce, and many other vegetables are point free.

These are brought to your local markets by railroads—often from thousands of miles away.

It is a tremendous job to keep the supplies of foods moving these days when railroad facilities are carrying unprecedented loads of war materials and supplies.

But the Erie and other American railroads are continuing to serve the home front as well as the battle front.

And those extra coupons you have as a result of buying fresh fruits and vegetables are with the compliments of your American railroads.



Erie Railroad

Buy War Bonds and Stamps



★ ONE OF AMERICA'S RAILROADS—ALL UNITED FOR VICTORY ★

Ration Book 3 has been completed "except for copies to members of the armed forces who are entitled to receive it, and to civilians who have not received it."

This is progress—a fact which is clear to all except those to whom it is not clear.

Correction

MR. RAY W. CLOUGH, of Seattle, takes us to task for a grievous error in our August issue. Seems that in our article about the federal Board on Geographical Names, we mentioned Lake Manchaugagognanchaugagognagungamaug, also known, for short, as Chaubunagungamaug. On the authority of a picture postcard, Mr. Clough says the correct name is Chargogagoggmanchaugagoggchaubunagungamaug, which he thoughtfully divides into three sections for our convenience. We can't do it here on account of the paper shortage.

While grateful to Mr. Clough for calling our attention to this situation, we hope the controversy will end there. We haven't had a wink of sleep since his letter arrived and we first tried to pronounce Chargog—etc.

Bad selling of a good product

AROUSE the average American's competitive spirit and he's off like a shot, ready to do or die for dear old Siwash. Some other members of the Brotherhood of Man are much mystified by this, because obedience and follow-the-leader are as instinctive with them as is the American's penchant for matching wits, brawn and dollars against the next fellow's. However, the American spirit of competition has two speeds, forward and reverse. You've got to be sure which way it's going to go before you step on the gas. Ask any parent who seeks to improve little Johnny's manners by pointing to the sweet example of the little girl across the street.

Which leads us respectfully to suggest to Secretary of the Treasury Morgenthau that he consult a couple of parents before going much farther with the argument that the British pay higher taxes than we do, and that we should feel pretty inferior about it. Everybody who gives five minutes' thought to the subject heartily agrees that we've got to get more tax revenue to finance the war and its aftermath, but the Treasury's argument is not only bad psychology, it's full of holes as wide as a blimp-hangar door.

The British national Government collects 90 per cent of all the taxes paid by its citizens. Our federal Government collects only 61 per cent, the state and local governments getting the rest. Yet the Treasury insists on comparing Britain's 90 per cent with our 61. Britain doesn't go in for double taxation, as we do when we tax business earnings at the source and take another cut when what's left reaches the stockholders' hands. Britain spreads her income tax over all groups; ours has been in the

nature of a class tax. And so on.

In sum, we think the average American's response to the Treasury's use of the British comparison is "so what?" There are plenty of good, sound, business and common sense reasons for paying as much of the war's cost as possible through taxation. Let's use 'em.

Who, what, and sometimes why

THE CRITERION of a business plan or project, a major war industry rightly reminds its executives, is not *who* proposes it, but *what* is proposed. That goes for all planning, public or private, domestic or international.

Melvin H. Baker, president of National Gypsum and an ardent advocate of private and public planning, says that some in government are long on high-sounding objectives but short on how to reach them. He recalls Will Rogers' plan to end submarine warfare.

"Just boil the ocean," Will told an Admiral.

"Good idea," replied the Admiral, "but how?"

"That," said Will, "is your job to work out; I've given you the idea."

Q. E. D.

LAST MONTH, Sir Ernest Benn outlined for our readers the creed and objectives of the Society of Individualists, which he heads in Great Britain. Ever eager to take up the cudgels against totalitarianism in whatever guise he finds it, Sir Ernest recently was challenged by an opponent who contended, in a letter to the London *Daily Telegraph*, that Sir Ernest's own successful career was the result of planning and therefore disproved his own arguments against the "planned existence." We give you Sir Ernest's reply:

Sir—One of your correspondents, Mr. Edmund Quarry, is good enough to refer to my business activities and ask, "Did Sir Ernest Plan?"

Of course, he did. He planned himself, not others; planned to pay taxes, not to spend them; planned to use persuasion, not power; planned to give satisfaction to others (both customers and workers, all of whom were absolutely free to accept or reject his plans). He planned to be an Englishman, not a totalitarian, and thus did no more than other independent Britons. There are millions of competent planners on our island and nothing less than the full and free force of all of them can save our civilization.

May I reply to Mr. Quarry with a question? "What would have happened to Sir Ernest had he been planned?"

Most government planning is proposed in the name of liberalism and democracy. A truly great liberal once said this test should be applied to anyone who calls himself a liberal, progressive or a believer in democracy: "Is he strong enough a believer in the people to permit the people to make and correct their own mistakes?"

Pennsylvania calls a halt

EVERY ONCE in awhile we hear of

NATION'S BUSINESS for September, 1943



PURE WATER—more vital to health than oil to a machine

WORKERS in war plants — all of us subject to the tensions and strain of wartime—are more than ever dependent, for health and efficiency, on an abundant supply of pure running water.

Your community water works is probably rendering good service in spite of wartime shortages in materials and war-deferred plans for improvements and extensions. Vital as they are to public health, water works and sewage works construction, as well as stream pollution abatement, have been largely deferred for the duration. Projects amounting to upwards of a billion dollars are in abeyance.

An informed public will insist that these vital services be constructed or restored to full efficiency as soon as possible after the war's end.

* * *

We publish this message in the public interest since our product — cast iron pipe — is used almost wholly in the public service. More than 95 per cent of this country's water mains are cast iron pipe which serves for more than a century.

NO. 1 TAX SAVER



Pipe bearing the above mark is cast iron pipe. Made in sizes from 1 1/4 to 84 inches.

CAST IRON PIPE

RESEARCH ASSOCIATION, CHICAGO

How to get the most out of G-E lamps in wartime!

Getting the most out of things is always important. *It's doubly important in wartime.* G-E makes over 480 tests, inspections and checks to be sure your G-E lamps are made to *stay brighter longer.* Below are a few simple things your own plant can do to help make them *stay brighter longer.* . . . serve better.

G-E MAZDA LAMPS

GENERAL  ELECTRIC



Hear the General Electric radio programs:
"The Hour of Charm", Sunday 10 p. m. EWT, NBC;
"The World Today" news every weekday 6:45 p. m. EWT, CBS.

Scene below: Apex Electric plant, Cleveland

Wash reflectors and lamps regularly—
Grease and grime on fixtures or
lamps can cut light as much as 50%.

Avoid direct glare — See that bare
lamps are not in workers' line of
vision; and be sure that lamps in
fixtures are properly shaded.

Light walls and ceilings—Painting with
light colors cuts glare, contrast and
shadows . . . increases safety.
Painting machines may help, too.

Have eyes examined—by a competent
specialist. Good light helps make
seeing easier; does not correct eye
defects.

No interfering shadows — Change
position or height of lighting so
that worker does not stand in his
own light.

Guard against reflected glare—Rem-
edies are to change position of
lighting unit, or angle of work.

INVEST IN YOUR COUNTRY'S FUTURE... WHY NOT BUY AN EXTRA WAR BOND THIS MONTH?

NATION'S BUSINESS for September, 1943

some authority, usually local or state, which resists the spread of paternalism. This putting of fingers in the dyke attracts small notice, and yet because the instances are local, they are all the more noteworthy.

Our attention was called the other day to a case challenging the validity of an act of the Pennsylvania State Legislature, providing for payments out of the state treasury to dependents of state employees in military service. The Pennsylvania Supreme Court invalidated the legislation, holding that dependents of state employees had no claim upon the public treasury which could not be made with equal merit by non-government employees in military service.

The court added:

"All history proves that exactly to the extent a government becomes paternalistic, every citizen's right to the fruits of his toil becomes insecure. If a government increases its power to do things for people, it must increase its power to do things to people. Every new largesse bestowed by a government on favored individuals means just so much substance taken from the fruits of other individuals' labor."

Are unions of age?

TWO RECENT California court decisions are important to both business and labor.

Superior Judge Dockweiler, at Los Angeles, ruled that a labor union is responsible for negligent acts committed by its pickets. The court held that the well established proposition that a principal is responsible when the agent is employed in the principal's business, applies to labor unions as well as to corporations.

Superior Judge Robinson, at San Francisco, ruled in favor of a corporation which asked damages against a union for malicious libel. Judge Robinson held that unions are subject to the same responsibilities for which capital is accountable under the law.

Many state legislatures, during the past two years, have written the theory of labor union "maturity" and responsibility into the statute books. Congress and the courts appear to be moving in the same direction.

C'est la guerre

THIS STORY may be apocryphal, but we doubt that so good a yarn would get so many chuckles from manufacturers if there weren't an element of truth in the situation it describes:

A manufacturing concern in the East applied to the proper government agency for a priority on a 100-foot machinery belt. In due time, came a letter from the agency requesting full information as to how much of the firm's production was for war purposes. The firm filled out the enclosed questionnaire, and stated that about 75 per cent of its work was war production. Back came the requested priority—for a 75-foot belt.

50 YEARS OF PROTECTION



Mr. J. F. McFadden, President,
American Credit Indemnity Company
of New York,
Baltimore, Maryland

Dear Mr. McFadden:

In any firm, a 50th Anniversary is a remarkable achievement but, because American Credit is an insurance company, your 50th Anniversary assumes added significance.

American Credit is now an "old insurance company" . . . and insurance companies become "old" only by honorable service . . . by excellent reputation in the business community. Our own 18 years of relationship is testimony of our confidence in both the financial strength and character of your Company.

While offering my congratulations, I should also like to extend my best wishes for the continued success of American Credit in the years ahead.

Very truly yours,

PLANTERS NUT & CHOCOLATE CO.

MP:MLP
M. Peruzzi

Vice-President



J. F. McFadden,
PRESIDENT

FIRST NATIONAL BANK BLDG.
Baltimore

"Guarantees Payment of Your Accounts Receivable"

OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

BRAINS AND PRODUCTS



An example of Blaw-Knox design and construction for the rubber industry.

Engineers . . . a complete organization including nearly all branches of engineering. Their knowledge can be applied to virtually every basic industry. They can think with you *now*.



Laboratories . . . research, metallurgical, chemical, well-equipped and competently staffed. From their systematized research come better materials, better methods.



Modern plants . . . steel fabricating, piping, machine shops, foundries, equipped with latest type tools and equipment and manned by workers trained in Blaw-Knox standards of precision.



Specialized knowledge and experience in building complete process plants—including research, engineering, design, construction of equipment and structure and test operation.



Unequalled facilities for designing and producing equipment for steel and non-ferrous industries. These play an important part in speeding production and reducing costs.



Pioneer and leader in designing and manufacturing construction equipment. This leadership is evident in great projects everywhere—dams, highways, waterways, harbor improvements.



PARTIAL LIST OF BLAW-KNOX PRODUCTS INDUSTRIAL PRODUCTS & SERVICES

STEEL PLANT EQUIPMENT
ROLLS FOR STEEL & NON-FERROUS MILLS
ROLLING MILL MACHINERY
CONSTRUCTION EQUIPMENT
RADIO & TRANSMISSION TOWERS

POWER PIPING
STEEL GRATING
STEEL & ALLOY CASTINGS
CLAMSHELL BUCKETS
SPRINKLER SYSTEMS

DESIGN, FABRICATION AND ERECTION OF CHEMICAL, RUBBER AND OTHER PROCESS PLANTS AND EQUIPMENT

A FEW VICTORY PRODUCTS

ANTI-AIRCRAFT GUNS
CHEMICAL PLANTS
PIPING FOR SUBMARINES
GUN SLIDES

AERIAL BOMBS
GUN MOUNTS
POWDER PLANTS
SYNTHETIC RUBBER PLANTS
CAST ARMOR FOR TANKS AND NAVAL CONSTRUCTION

... to help you establish yourself profitably in tomorrow's market

Right now Blaw-Knox may have little to offer that is not connected with the war effort. It has, however, a wide line of engineered products, which, combined with long experience, knowledge and special skills, may be of value to you now or in connection with postwar planning.

To list everything that Blaw-Knox offers to industry would cover many pages. Those responsible for the postwar success of their business are invited to request a discussion with us to determine how Blaw-Knox thinking and products may best serve them.

BLAW-KNOX COMPANY

2053 FARMERS BANK BUILDING, PITTSBURGH, PA.

LEWIS FOUNDRY & MACHINE DIVISION • UNION STEEL CASTINGS DIVISION • POWER PIPING DIVISION • NATIONAL ALLOY STEEL DIVISION
PITTSBURGH ROLLS DIVISION • BLAW-KNOX DIVISION • MARTINS FERRY DIVISION • BLAW-KNOX SPRINKLER DIVISION • BLAW-KNOX BOMB DIVISION

Four Blaw-Knox plants have been awarded the Army-Navy "E" for production excellence.

DOWN TO THE SEA IN BOXCARS

EVERY DAY enough freight cars to carry the daily food of half the people of the country roll into the seaports, loaded with war materials and other freight for export.

To do this part of the war job has, at times, meant rushing special trains of critical materials clear across the continent to catch convoys. It involves, every day, maintaining near each of the nation's ports of embarkation a sufficient "bank" of cars loaded with war freight to insure that no convoy shall be delayed, no ship shall fail to be loaded promptly.

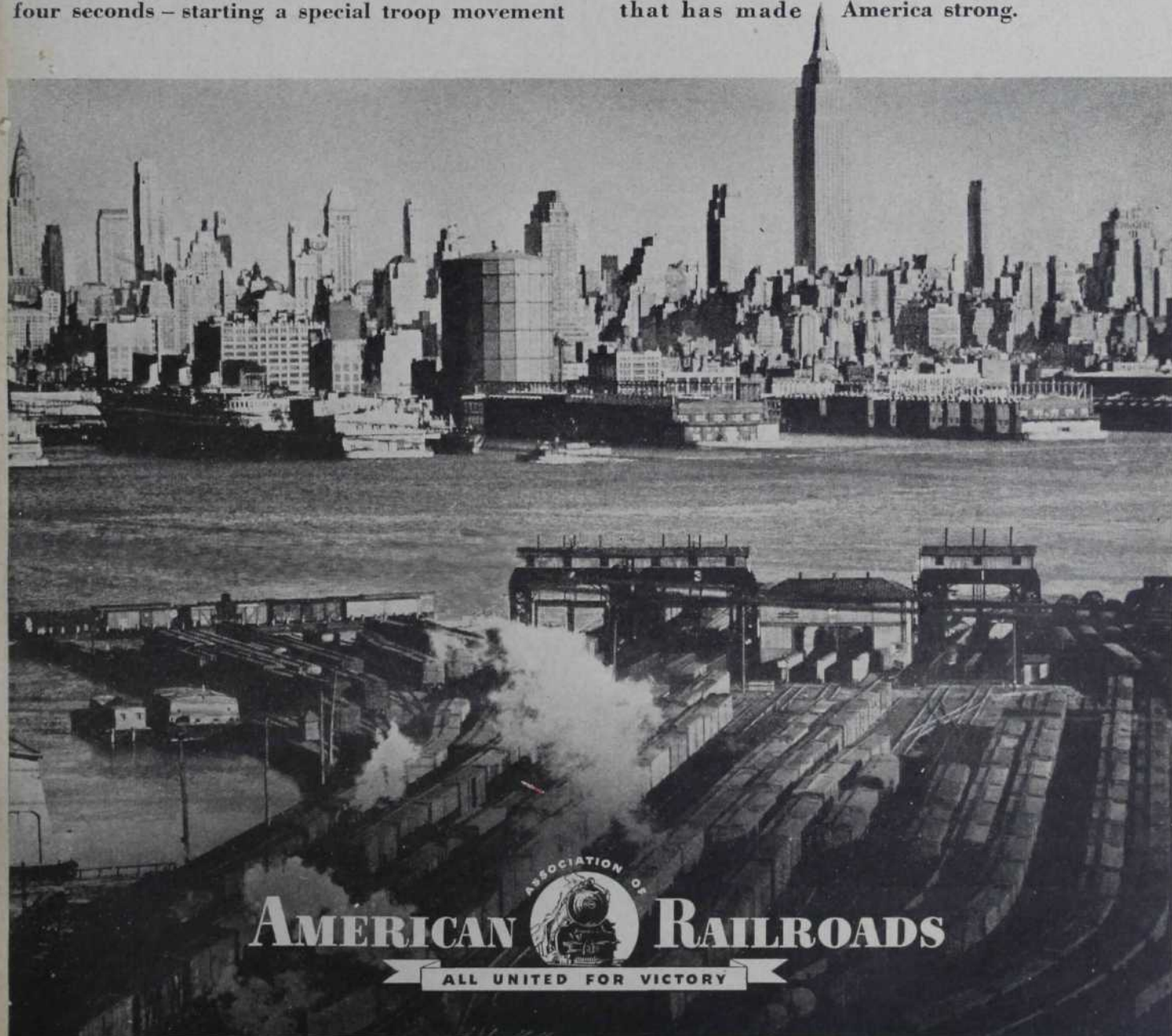
And this is but one small, though most important, part of the day's work of the railroads. The total job means starting another freight train on its run every four seconds — starting a special troop movement

somewhere in the United States about every six minutes, day and night.

Those are some of the reasons why coaches and Pullman cars are scarce for ordinary travel, why trains are sometimes crowded, why travel is not always up to the high standard which you expect and which the railroads try to maintain.

Other war needs have prevented railroads from obtaining the additional cars and engines they need, but they are using to the limit what they have and what they can get to meet the nation's demands for transportation.

Like other resourceful, self-reliant, American enterprises, the railroads are subordinating everything else to victory — to maintaining the freedom that has made America strong.





THE MOST DANGEROUS SPOT in America is . . . the American home! Last year, out of a total of nearly 10 million accidental injuries, more than half took place in the home . . . another third took place in streets, schools, places of amusement, etc. . . . while less than twenty percent occurred at work! There's no place like home—for accidents!

PROTECTION—every hour, every day.
You, as a businessman, may be com-

pensated by your company for injuries sustained while on the job. But if you work 8 hours a day, it means you are unprotected for 16 hours out of the 24. More, your wife and children at home (the most dangerous spot of all) are *totally* unprotected unless covered by accident insurance. Would you like to meet a \$100, \$200, or \$500 medical bill this month?

To end the threat of unexpected and crippling medical expenses, U. S. F. & G. offers its Double Protection Plan, styled to fit the needs of businessmen or businesswomen and their dependents. This Double Protection Plan falls into two main divisions, as shown in the column at the right.

"Consult your Agent or Broker as you would your Doctor or Lawyer"

U.S.F. & G.

UNITED STATES FIDELITY & GUARANTY CO.

affiliate:

FIDELITY & GUARANTY FIRE CORPORATION

HOME OFFICES:  BALTIMORE, MD.

Branch Offices in 43 Cities • Agents Everywhere

*Here are the
benefits of this plan*

PROTECTION for you

- Pays \$25 per week as long as you are unable to work . . .
- Pays any and all medical, surgical and hospital expenses and nurses' fees up to \$500 for any one accident.
- Provides benefits from \$1,250 to \$5,000 for loss of limb or sight.
- Covers the 120 or more hours per week when you are not protected by company compensation.
- Gives special optional features of \$25 to \$325 for fractures and dislocations. May be written in larger amounts, if desired, or otherwise tailored to suit your specific needs.

Annual Cost,
Men . . . \$21.75
WOMEN . . . \$28.25

PROTECTION for your family

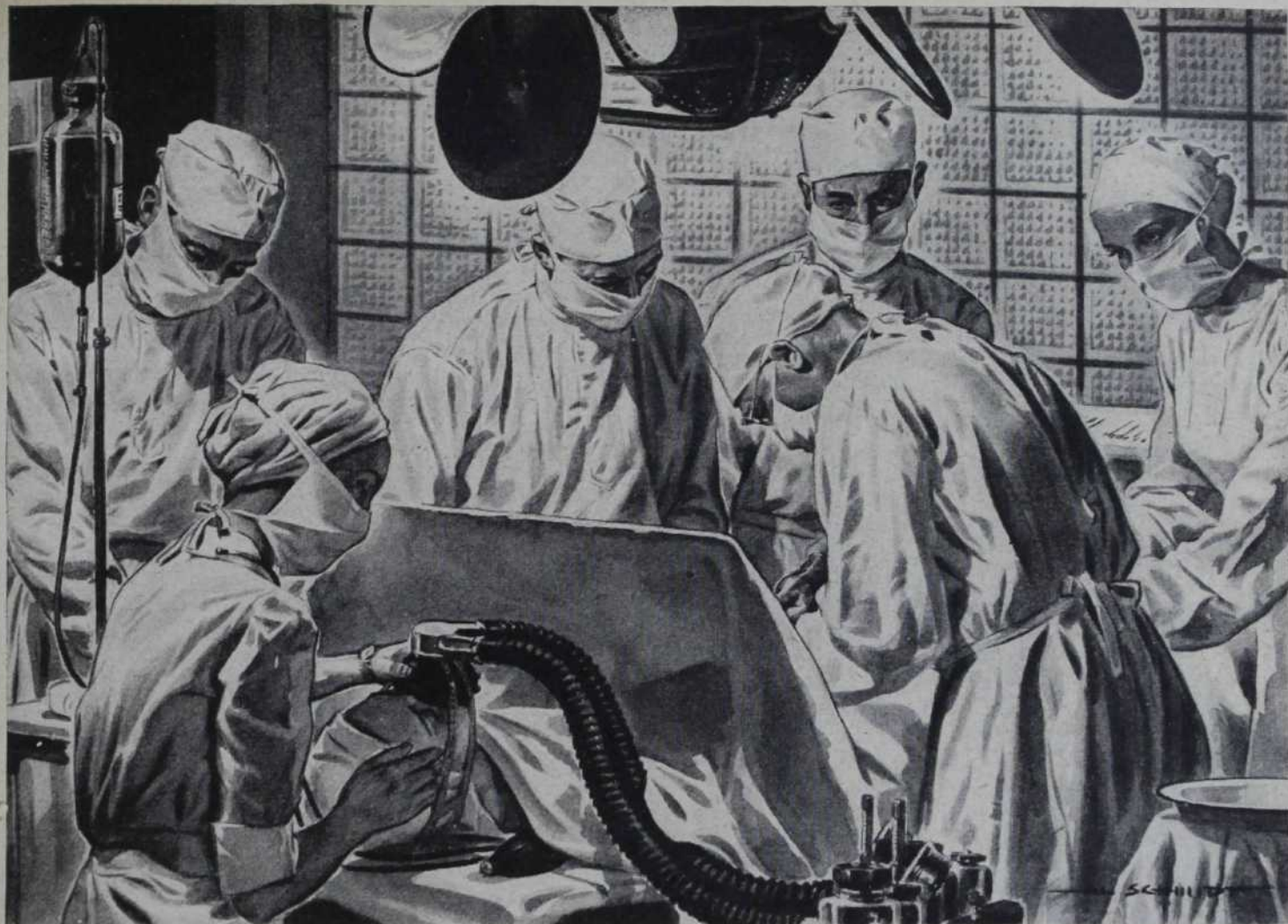
- Covers unemployed women or children, 6 years and up, at all times.
- Pays any and all medical, surgical and hospital expenses and nurses' fees up to \$500 for any one accident.
- Provides benefits from \$1,250 to \$5,000 for loss of limb or sight. These sums will be *doubled* if loss occurs in a public conveyance or under other specified conditions.
- Provides \$500 benefits for accidental death. This sum will be *doubled* if loss occurs in a public conveyance or under other specified conditions.
- Gives special optional features of \$12.50 to \$162.50 for fractures and dislocations.
- May be written in larger amounts, if desired, or otherwise tailored to suit your specific needs.

Annual Cost,
Women or Girls \$15.50
BOYS . . . \$18.95

Learn More about this low-cost plan

For further information about U. S. F. & G.'s Double Protection Plan, you have only to fill out and mail the attached coupon. But remember, if it took you five minutes to read this advertisement, in that time one person has been killed, 90 injured, through accidents. So don't delay. Fill out and mail coupon.

UNITED STATES FIDELITY & GUARANTY CO. Baltimore 2, Md.
Gentlemen:
Please mail me further information on your new Double Protection Plan.
— For Employed men or women.
— For Unemployed women and children.
— For both.
Name _____ Address _____
City _____ State _____



New technique for blood transfusions uses special rayon fabric

HOW MANY TIMES have surgeons defeated death with the aid of a blood transfusion?

Yet a serious hazard in the administration of blood and plasma is the presence of fibrin and gelatinous material in the stored product. And this problem is particularly emphasized today with the huge quantities stored in blood banks throughout the country and our hospital bases abroad for war purposes.

For successful transfusions, fibrin and gelatinous material must be filtered out. But sometimes the filters clog and leak in use. Metal screens are either too coarse to retain the undesirable material or so fine they clog easily. Too, they are difficult to clean aseptically. Gauze filters offer no solution. Their fibers may be liberated into the filtered blood.

To offset these hazards, the laboratories of American Viscose have engineered a special, sheer rayon cloth. It is now being used by several well-known public hospitals and clinics.

Placed in an inexpensive, disposable apparatus, the sheer rayon filter bag does not clog or leak in use. It liberates no fiber particles in the solution. It permits continuous administration of the blood and plasma under aseptic conditions.

Here is a new measure of safety that furthers the development of American surgery. And American Viscose Corporation is proud of its contribution...another example of its program of continuous research for the development of new yarns and improved fabrics from the basic fiber, rayon, for America.



AMERICAN VISCOSE CORPORATION

Producers of CROWN® Rayon Yarns and Staple Fibers

Sales Offices: New York, N. Y.; Charlotte, N. C.; Providence, R. I.; Philadelphia, Pa.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★

*Reg. U. S. Pat. Off.

Copy, 1943—American Viscose Corp.

A KAISER-TYPE JOB Needs Truck-Trailers!

A LOT OF FACTORS enter into the fabulous ability of the Kaiser shipyards to turn out Liberty Ships and Tankers almost as if they came from punch presses.

One of these is the handling of material. And that's where Truck-Trailers come in. At the four Kaiser yards on the Pacific Coast various types of Trailers haul many kinds of material . . . all of it heavy and hard to handle. But let's look at just one operation that's typical of Trailer ability to take over the difficult, unusual jobs.

Boilers for Liberty Ships . . . giant units weighing 50 tons . . . are fabricated in one place, tested a quarter-mile distant, then installed in ships on ways a half-mile to a mile farther on. That's assembly-line production, a la Henry J. Kaiser. And Fruehauf Trailers are the conveyors.

A low-bed Fruehauf Trailer is backed under the boiler, which is erected on a low foundation . . . there's only an inch leeway on either side, showing how maneuverable Trailers are . . . and the boiler is lowered.

At the testing area, the boiler is immediately removed and a tested boiler loaded on

the Trailer, to go to the shipways. Not a minute wasted. And it's a 24-hour, 7-day job.

This entire, vital procedure is built around the use of Trailers. More than that, there's no other method even remotely practical.

This Kaiser operation is highly specialized, of course. But Trailers do specialized and routine work with equal facility. And most of their tasks, in both war-time and peace-time, couldn't be done as well, if at all, by any other method. That's why all of America's Truck-Trailers must be kept running . . . and why tires, parts and replacements must be made available.

World's Largest Builders of Truck-Trailers

FRUEHAUF TRAILER CO., Detroit

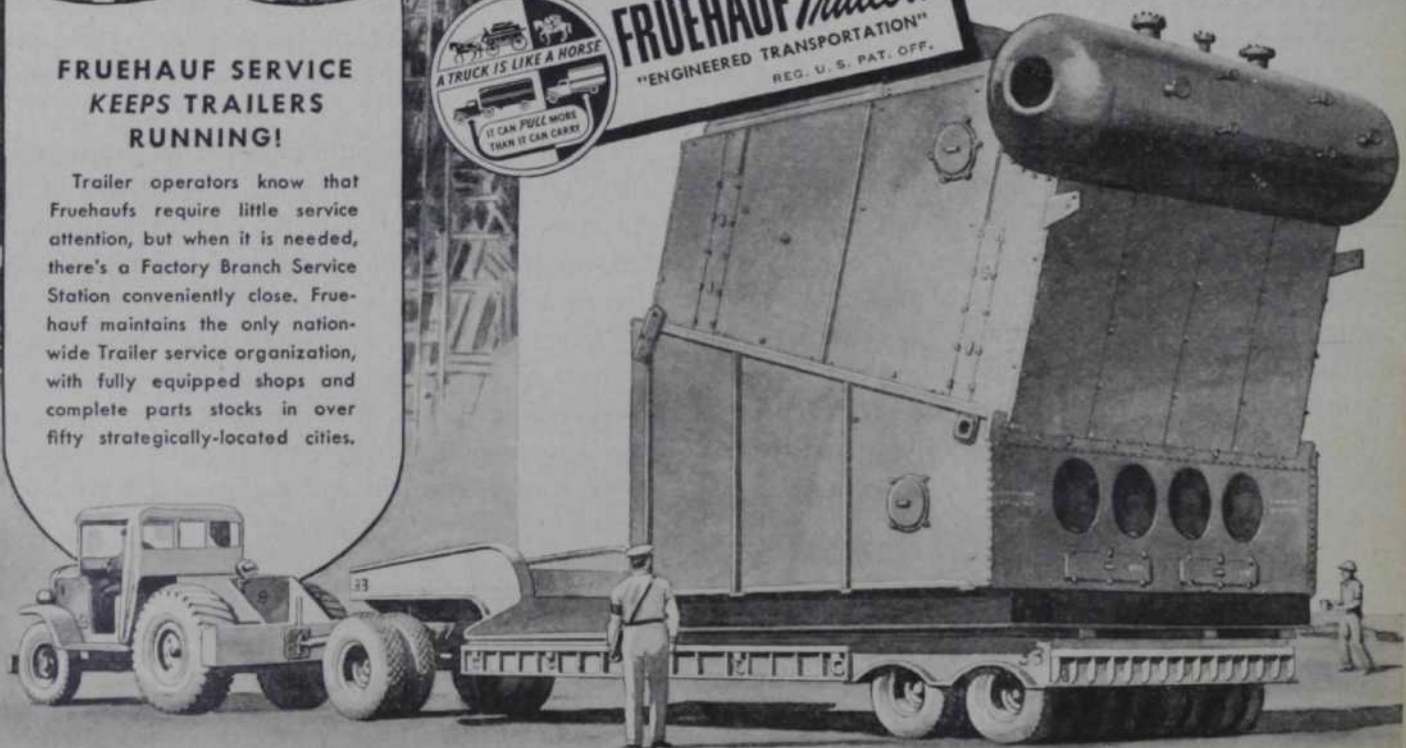
Member Automotive Council for War Production

FRUEHAUF SERVICE KEEPS TRAILERS RUNNING!

Trailer operators know that Fruehaufs require little service attention, but when it is needed, there's a Factory Branch Service Station conveniently close. Fruehauf maintains the only nationwide Trailer service organization, with fully equipped shops and complete parts stocks in over fifty strategically-located cities.



FRUEHAUF Trailers
"ENGINEERED TRANSPORT"
REG. U. S. PAT. OFF.



TRUCK-TRAILER TRANSPORT IS DOING AN ESSENTIAL JOB FOR ALL AMERICA

MANAGEMENT'S

Washington LETTER

A last minute roundup by a staff of Washington observers of government and business

ISSUES OF UTMOST IMPORTANCE TO EVERY U.S. businessman are on the agenda of Congress, reconvening this month.

These issues touch on almost every phase of wartime living, in the office, shop or home.

Many extend their influences beyond the war, may produce effects that will be felt for generations.

Seldom has any Congress ever faced a session so heavily loaded with important work—work that must and will be done.

► Taxation is one of the most immediate questions on Capitol Hill.

Treasury will insist on legislation increasing revenues by 12 billions.

This is vitally necessary to provide war funds, absorb inflationary cash—that's Treasury's story.

Its program will include increases in corporation and personal income brackets, federal taxes on state and municipal bonds, other old Treasury standbys.

Congressional leaders say new legislation will raise only half the Treasury goal—half at best.

Most likely figure is somewhere between three and four billions.

This may be raised either by a federal sales tax, by forced savings, or both.

Look for small increases in income levies, both corporation and personal.

Corporation increases most likely would provide some exemptions for post-war reconversion and employment—perhaps tied to employment of veterans.

► Federal expenditures, including those for war, will get much closer Congressional examination.

Huge and growing budgets, tax demands, public debt and unexpended balances are making members spending-conscious.

Particularly the unexpended balances, which may be transferred at will by the executive, diverted to other uses.

This, in effect, takes away the legislative arm's purse-string control.

Restoration of this control through closer scrutiny of budgets is planned.

Some members want to go so far as to fix an over-all expenditure limit, fit executive requests into it, instead of receiving the budgets from the White House, then searching for funds to finance them, as in past practice.

House Ways and Means Committee paved the way for further budget controls by its successes toward eliminating NYA, NRPB, sharply cutting other agencies.

► A National Service Act will have the President's support, either openly or behind the scenes.

That word comes from sources close to the White House.

Same sources say continued failure of war production to meet goals is resulting in new and stronger pressures for compulsory job controls.

War Manpower Director Paul McNutt never has dropped his compulsion program.

Labor's united opposition makes enactment of such legislation unlikely.

► Draft of pre-Pearl Harbor fathers will be prohibited, unless a miracle upsets Congress' intentions.

Many members of both Houses express deep resentment at the father draft notice issued during the summer recess.

It came as a surprise to them—and also to those who execute such orders.

Legislators point out that bills restricting father drafts were pending, charge the Administration with waiting until Congress had recessed, then taking steps contrary to known policy of the lawmakers.

This administrative action will backfire.

Capitol Hill will leave less to the Administration's discretion, may bind Selective Service in legislation that will direct nearly every detail of its operations.

Uncertainty, lack of understanding of the problem was demonstrated within a few hours after the father draft notice was issued.

Note the quick reaction of West Coast aircraft plant executives who descended on Washington, said the order would take 60,000 critically needed workers.

Note also the speedy revision of the order as it affected these workers.

► Anti-strike legislation passed last spring will be the center of a hard fight.

Labor will battle for repeal. Congress won't move unless the pressure is great.

If pushed hard enough, legislators will counter by opening a full-scale investigation of the Administration labor policy, string it along endlessly.

There's a chance for enactment of the Hobbs Bill, now before the Senate, to bring unions more clearly under the anti-racketeering laws.

But aside from that possibility, don't look for any new labor laws.

► Prompt payment on terminated war contracts will be provided in early action, expert observers report.

Possibility of freezing tremendous amounts of capital in partly finished contracts raises questions concerning the financial stability of many war producers in event of sudden cancellation; resulting unemployment adds to the importance of this issue.

Two plans are under consideration.

One would provide for payment of audited claims on presentation, with negotiation of a final settlement figure to follow.

The other would provide loans of from 75 to 100 per cent of claims, with adjustment to be made on final settlement.

► Thorough-going housecleaning of OPA will be demanded in many congressional quarters.

That agency is far and away the outstanding subject of a steady drone of complaints heard by members summering at home, among their constituents.

Administration may (quietly) offer the housecleaning in return for whole or partial support of its food subsidy program.

Congressmen deluged with food price complaints will be tempted to retreat part way in their opposition to subsidies.

Executive branch is determined to push the subsidy program through.

Talking points: Farm prices must be maintained to insure food production; subsidy would help curb inflation.

Farm leaders say prices matching industrial wage increases would give

farmers fairer returns, more incentive.

Wage earners have the cash, are able to pay, these leaders contend. This, they add, makes subsidies an unnecessary addition to the federal debt.

By leaving more cash in war workers' pockets subsidies would help, not hinder inflation, they argue.

But the Administration wants less high price talk during the election year.

► Voice in international relations will be demanded by the Senate.

White House decision to enter international rehabilitation program through executive order has aroused senatorial ire, brought up plans to insist on a part in all international affairs.

These include transport, trade, rehabilitation and other policies.

Significant was Senator Bennett Champ Clark's pre-recess notice to the executive branch that a nine-member subcommittee was studying world airways problems, wanted no executive action until it had opportunity to form policy.

► Social security plans will get little legislative attention this year, or next.

Hearings may be opened on an "American Beveridge plan," but they would be exploratory only.

Chance for social security action during the life of the present Congress is negligible.

► Disposition of surplus war property and postwar operation of government-owned plants both hinge on the O'Leary Bill, now before the Senate.

That means legislation covering these subjects probably will not be written until next spring or summer.

O'Leary Bill would set up a committee to study both problems, recommend legislation in six months.

► U. S. soon will have plenty of synthetic rubber, not enough gasoline.

Situation at present is building toward an actual, perhaps acute, gasoline shortage.

Here are the figures:

Oil production during the four prewar years averaged 3,500,000 barrels daily. Military needs were negligible.

Now production is 4,000,000 daily.

Lieut. Gen. Brehon Somervell reports military takes 1,000,000, exclusive of aviation.

Aviation takes another 1,000,000.

Which leaves 2,000,000 barrels, little

more than half of that used by civilians in prewar "normal" years.

Present producing areas could turn out more oil, experts say, but more pumping would shortly cause a drop in pressure, bring a greater oil shortage later.

Solution, they add, lies in opening new fields—wildcatting, but price ceilings discourage it.

Nation-wide spread of the petroleum shortage was caused by war, not by government edict.

No longer is there an abundance of gasoline in the producing areas. The Army, Navy, have absorbed that.

Look for an end of gas rationing when Germany is licked and the armed forces need less of it, but not before—whether rubber is plentiful or scarce.

► Optimistic food production reports emanating from government officials are designed to appease the mind, not the stomach, independent farm experts say.

These observers still doubt crops will reach more than 90 per cent of last year's, despite more hopeful official forecasts.

No one knows what the harvest will be, they contend, because measuring methods are distorted.

Price uncertainties, shortage of harvest manpower and machinery, add inaccuracies to estimates, they add.

Many observers say food stories distributed by various government agencies often fail to agree.

Sample cited is War Food Administration story that soybeans will augment civilian supplies of meat, eggs, dairy products.

WFA said soybean flour will be added to bread, soups, cereals, pancake and other mixes.

But Department of Agriculture figures show 14,222,000 acres of soybeans harvested last year, estimate—optimistically, perhaps—this year's harvest at 15,434,000 acres.

That's a rise of only eight per cent—and industrial uses also are rising, leaving little, if any, room for additional civilian uses.

► Board established by the Transportation Act of 1940 to study subsidies, taxes, right-of-way costs or advantages of the various common carriers will delay making its report.

Pressure from southern Congressmen to examine the highly controversial territorial rate question has switched the board off the main track.

Nelson Lee Smith, former public service commissioner of New Hampshire, heads the board.

► Stockbrokers, too, have manpower problems.

Volume of share trading is three times last year's, nears brokers' capacity to handle it.

Two years of record breaking industrial output have broken down market fears, increased trading, but have contributed little to value of shares.

Dow-Jones averages show industrials only about six per cent above 1940 prices, utilities a point or two off.

Both are below prewar levels.

Wage earners, Treasury—not shareholders—are taking the profits.

► Wide new fields of business are opened to private insurance companies by a Controller General's opinion holding that the Government's historic custom of insuring itself is policy, not law.

Commerce Secretary Jesse Jones sought the opinion in connection with coverage on airplanes owned by Defense Plants Corporation, used by private contractors in Army, Navy flight training programs.

► Don't interpret WPB's turn-out-the-light campaign as indication of a power shortage.

There isn't one. But conservation saves coal in generating plants, manpower in coal mines.

TOO LATE TO CLASSIFY: There is 18,000,-000,000 of currency in circulation in U. S. compared with 12,600,000,000 a year ago....Army Air Transport Command is returning some of the airliners taken from commercial lines for war work, making possible civilian service expansion. ...Republican headquarters is receiving showers of small contributions from citizens, but few big checks yet.... Father Haas of the Fair Practices Commission and Manpower Chairman McNutt have agreed on their respective spheres in handling racial discrimination cases, ending a behind-the-scenes deadlock.... Note carefully that airplane production has not fallen off; it has increased, but rate of increase isn't up to Government's published expectations.... Akron rubber companies are reported working on a \$92,000,000 expansion program in connection with synthetic tire manufacture. ...WAVES stationed in Washington complain that they haven't enough to do.



GEORGE WALKER

In Step with the Future

THE above illustrates a super service-station of tomorrow. Automobiles will be serviced on the ground floor—helicopters on the roof. The Bohn organization after Victory, will turn their attention and the full fruits of their research to a wide variety of new developments like the one shown above, as well as innumerable other projects. Remember the name Bohn, one of the world's foremost sources for non-ferrous alloys and advanced metallurgical studies.



BOHN

BOHN ALUMINUM AND BRASS CORPORATION, DETROIT, MICHIGAN

GENERAL OFFICES—LAFAYETTE BUILDING

Designers and Fabricators — ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT-TYPE BEARINGS

Let's Make It a Personal Fight!

THIS MONTH will witness an event heavy with significance. In many ways it will transcend, because it will determine, political and military events on both home and battle fronts. It is likely to have a profound influence upon the length of the war—involving the sacrifice of men, property and perhaps the state of our future form of government.

This month the Government requests from its individual citizens the voluntary investment of \$15,000,000,000, the largest financing program in the world's history.

The response will spell out answers to questions in the minds of our own people, in those of our Allies, and, more important, in those of our enemies.

Dollars in this case speak louder than lips, than parades, than resolutions, than Acts of Congress. Earnest money is a time-honored phrase among all peoples. It is a pledge; it is a token of determination. It comes from our sweaty labor of today, or from the result of our labor of yesterday. A voluntary out-pouring of dollars will drive down the morale of Jap and Hun more quickly and definitely than the drafting of a million sons and fathers.

We Americans boast of our freedoms. We exhort other unhappy peoples to note and take hope. We set up our freedoms of choice, our voluntary methods against the disciplines and compulsion of dictatorial regimes.

Today we face an obligation, an obligation to pay. We cannot endure as an insolvent republic. That way dictatorship lies. Liberal governments are wrecked on the shoals of loose fiscal policy.

If we do not meet voluntarily this war obligation, what then?

The alternative? Forced loans and forced labor. If voluntary financing fails, make no mistake, compulsory financing will follow quickly. But the fear of forced buying and even capital levies is to put the case upon a gross material basis. The fear should be in the loss of that

freedom of choice which we are defending and which we promise to our vanquished foes.

Upon the business man of a thousand communities will fall the brunt of the task. Contrary to the demagogues and wise-crackers, he is the man a community looks to for counsel and example in matters financial. His reasonings, we are led to believe, when he invests his money, are based upon wisdom and not emotions.

His example as a bond-buyer will mean much.

The business man is an organizer. He knows how to assay and reach markets. He then knows how to present his wares attractively and honestly—thus convincingly. He knows how to reach customers efficiently and economically of time. He knows how to build men and women into a team, to see the job as a whole, to delegate duties and responsibilities, to direct and, in all, to encourage.

His experience in helping to organize for this effort will mean much to his community, and the nation.

Great news, indeed, if the announcement should come around October 1, that Tokyo had been successfully bombed, that Italy was training her guns on Germany, that Allied soldiers were marching against Berlin from the mainland. But the best substitute for such a morale-building event for us, and most destructive of enemy morale, will be the announcement that the hearts and will and sinews of the American people are in this war to the finish.

A September war bond proudly pocketed by 40,000,000 Americans will chill the zeal of the war lords of Japan and Germany. And it will create a fighting spirit at home, a determination to win completely and quickly, that will carry us surging forward in our resolve to build, post war, a better world in the tradition of free America.

Merce Thorne



If that's what the Luftwaffe is using ...our SYNTHETIC RUBBER will beat it!

"TO protect aircraft from incendiary fire the Luftwaffe is using a bullet-puncture-sealing petrol tank built of a composition of fibre, buckskin and raw rubber, with an inner lining of thin vulcanized rubber." So the British reported shortly after the outbreak of war in 1939.

This was vital information to American aviation engineers. Could Yankee ingenuity devise superior fire-protection? Goodyear was consulted—since Goodyear had developed the first successful self-sealing fuel tank for the U. S. Air Corps at the close of World War I.

Goodyear chemists pointed out that this

German tank was not suitable for the high-octane aromatic gasoline burned in American engines; that U. S. fuel "softened up" rubber far more rapidly than the lower-test gas used by the Nazis. The real answer, they advised, was a liner that had proved its complete imperme-

ability to gasoline—a synthetic rubber like Goodyear's Chemigum.

That was nearly four years ago. Today all American battleplanes are protected

with fuel tanks lined with Chemigum or a similar synthetic—tanks so efficient they self-seal bullet holes in a twinkling—tanks that are saving the lives of many of our boys.

Unfailing resistance to solvents is only one of the reasons why synthetics are fast replacing natural rubber in many usages. Today all the Chemigum Goodyear can produce is needed for fuel tanks and other military purposes. But the time is coming when Chemigum's superior resistance to oxidation and oil will be available to the public in tires and other products, sold under the quality standard of the greatest name in rubber.



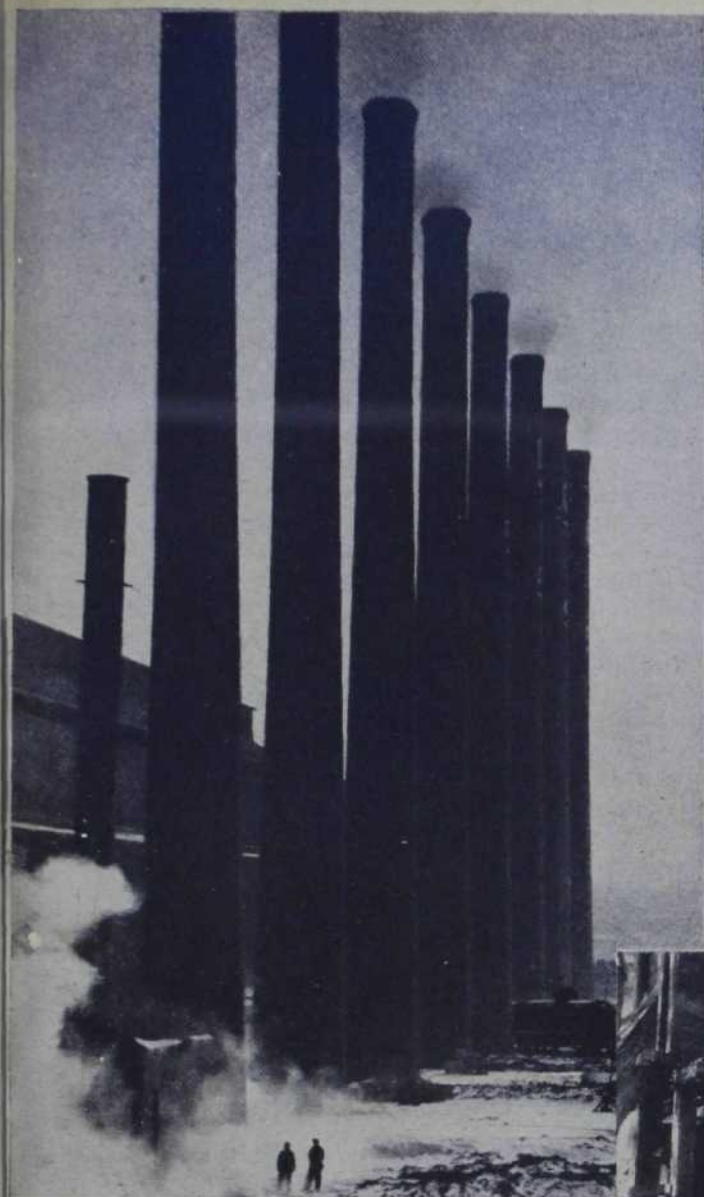
GOOD YEAR
THE GREATEST NAME IN RUBBER

Chemigum (pronounced Kem-i-gum)—T.M. The Goodyear Tire & Rubber Company

Dixieland Goes to Town

By LARSTON D. FARRAR

NO PART of the nation is doing a greater war job than the South, and the men who made this military production possible are already laying plans for continued postwar progress



MARGARET BOURKE-WHITE

On the right, the Dixieland of the songwriters. Above, a truer picture of the modern, industrial South

"Way down South in the land of cotton, Old times there are not forgotten. . ."

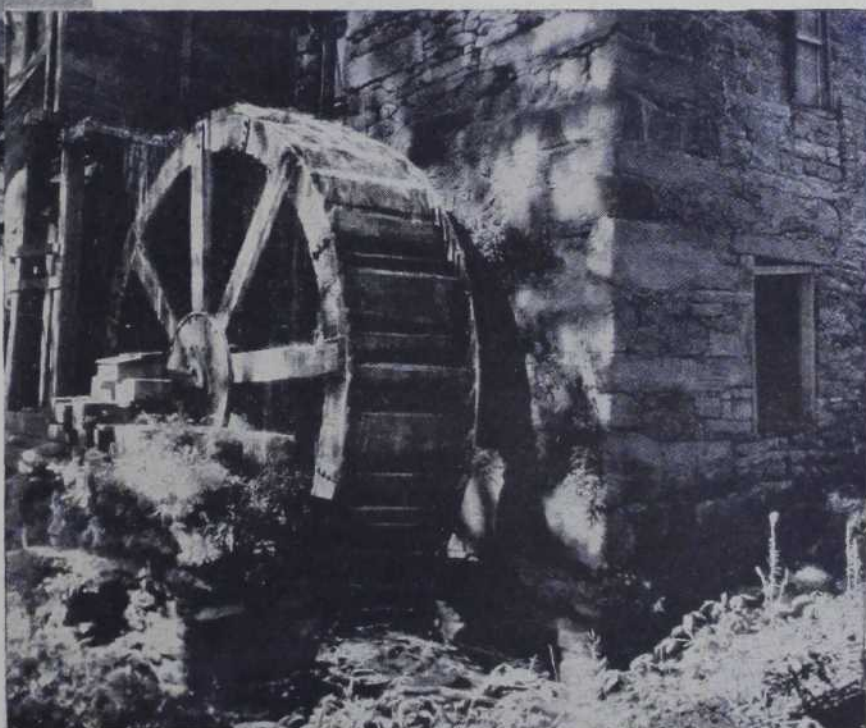
SO WENT the marching song that sustained the Confederate armies until a collapsed national economy sent them tramping barefoot home. So has gone a whole catalog of American folk music in which generations of nostalgic songwriters have been "dreaming tonight of a field of snowy white; banjos ringing. . ."

The music is still inspiring—but the lyric wants re-writing. The South is no longer merely the land of cotton and the old times are very definitely forgotten.

The Old Kentucky Home houses a war worker and the percussion instruments are not banjos but riveting machines, as today's South operates:

The largest combination powder and explosive plant in the United States, the Alabama Ordnance Works, at Childersburg, near Birmingham.

The largest citrus cannery plant in the United States, at Lake Wales, Fla.



EWING GALLOWAY

The largest repair and supply depot in the nation at San Antonio, Texas, where military personnel has increased 600 per cent since 1940.

The largest bomber and airplane modification plant—bigger in some respects than Willow Run—in Marietta, 15 miles from Atlanta. It was built in less than a year, cost \$60,000,000 and will employ 30,000 persons.

One of the largest airplane plants anywhere, the gigantic North American Aviation plant at Dallas, where 95 per cent of the labor is Texas-born, Texas-trained.

The biggest high-octane gasoline area in the nation, the Sabine district of southeast Texas, near Port Ar-

thur. It is now producing 40,000 barrels of high-octane gas a day—more than the output of the entire nation for a year in 1937!

The largest chemical warfare plant in the United States, the Huntsville (Ala.) Arsenal, covering 40,000 acres, employing 8,000 persons, operated by the Chemical Warfare Service of the U. S. Army.

The largest number of service industries in Mississippi in her long history.

What songwriters overlooked

IN addition: Miami has become the top port of entry in the nation, for air visitors between the Americas, chalking up 56 per cent of all arrivals and departures in March, 1943, as compared with New York's 14 per cent.

Mobile is our No. 1 boom city. Its population, having more than doubled in the past three years, is still growing, although its increases have come by *expansion* of existing industries, rather than starting new ones!

These things did not occur because of political expediency, or because the world was topsy-turvy anyhow. They happened because, through the years while the songsmiths were plugging the delights of returning to Dixie, able men who had stayed there were merely plugging.

The South in 1865 was a defeated country within a country. Its once proud civilization, built on slavery, was crushed. Reconstruction had heaped hateful problems on pitiful ones. The main crop, cotton, depended on a social system that was no more and, eventually, the boll weevil appeared to administer what could have been the *coup de grâce*.

Such a picture offered little to the casual observer. Those who looked closely enough to study the background were not completely depressed. Careful scrutiny showed many things—natural resources, an urbane climate, a population intelligent and able to lick its weight in any kind of problems that might be stacked against it.

The section had always had leadership. It is significant that, in the past, those leaders had turned to politics. Today the South's best known citizens are its industrialists.

The region traditionally known as "the South" embraces 12 states—Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Louisiana, Arkansas, Oklahoma and Texas.

In 1865, these states totaled about 9,000,000 citizens. Today they have about 35,000,000, or more than one-fourth of the nation's population. Eight of them have shown appreciable increases since the 1940 census.

Progress of the region from 1865 to 1910, to put it mildly, was "gradual." Cotton, though its throne was shaky, was still "King," there were prejudices that southern labor was lazy and not naturally mechanically minded.

The armament program for World War I did something to cure that. On a small scale—as this war has on a grand scale—it gave the South a little more industrial know-how, a glimpse of what industrial production can mean in income and a desire for wider opportunity.

It is probable that industrial and agricultural diversifications have never been practiced so widely anywhere as they have in the South during the past three generations. The results were good. All 12 southern states were included among the 31 with higher-than-national-average increases in income tax payments since 1929. Significantly, Arkansas, long known among its poor southern relatives as, "The poorest state in the nation," showed a higher percentage increase in income tax payments than any other state in the 1939-1942 period.

By 1940, the South paid homage to no one king. Cot-

ton was still an important crop but so were tung oil, citrus fruits, tobacco, soy beans, peanuts, cattle, corn, sugar cane, poultry, wheat, dairy products, pecans, potatoes, sheep, goats and truck garden products—and, in the growing cities, 15,000 manufacturers were turning out textiles, steel and other products.

Under the impact of total war, these manufacturers showed the same ingenuity as their northern contemporaries, and southern labor demonstrated that it not only was neither lazy nor incapable—it was amazingly versatile and unusually dexterous with its hands.

When the fog of conversion cleared away, the South found itself committed to a medley of unexpected jobs. It is still doing them—well:

In Orlando, Fla., the American Machinery Corporation, packing-house and citrus-canning machinery company, is now manufacturing merchant ship parts and equipment and heavy barges. Hubbard Casselberry, Inc., one of the largest growers and shippers of ferns in Florida, is manufacturing bomb chutes. Pine Castle Boat and Construction Company, which used to make pleasure craft of all types, is now manufacturing crash and patrol boats and other naval equipment.

In Dallas, three companies which used to make cotton gin machinery—the John E. Mitchell Company, the Murray Company and Continental Gin Company—now are 100 per cent on war work, producing ordnance.

It's the same story of ingenuity and determination wherever you look down south—the largest mechanical pencil manufacturer now making bomb parts and precision instruments; the chenille bedspread industry making mosquito netting; a soft-drink company managing a shell-loading plant; an automobile dealer making airplane parts. While the old plants converted, new ones were built.

Ships 450 miles from the sea

TODAY, plants manned with southern labor are producing airplanes in Atlanta, Birmingham, Nashville, Memphis, New Orleans, Houston, Dallas, and in half-a-dozen other places. Chemical plants are turning out high explosives, synthetic rubber, and other products in cities from Baltimore to Beaumont.

Ship-building companies dot the southern shoreline from the Chesapeake Bay to Corpus Christi, Texas; and all over the region, manufacturers produce parts for Liberty ships, destroyers, barges, tugs, rescue boats, assault boats, lighters, minesweepers, and P. T. patrol boats. Ships are going down to the sea from Decatur, Ala., 450 miles from the nearest salt water, from Nashville, which is even farther, and from Memphis.

People who talk about the South of 1943 as if it were the South of 1939, or 1929, obviously have not seen the South today, even if they live there. They have not gone through North Carolina to marvel at its impressive array of modern industries; they have not stood in the hills of Upper East Tennessee and looked on the flourishing city of Kingsport, which occupies a broad valley today that held only virgin timber two decades ago; they have not seen the red glow of the enormous steel mills in Birmingham; they have not visited the ultra-modern aluminum and magnesium plants; they have not seen the tremendous expansion of water power in the Tennessee Valley, nor the similar developments in Texas and Oklahoma and Arkansas; they have not seen the aggregation of industries deep in the heart of Texas; nor a land dotted with Army camps, supply depots, Naval bases, air schools, chemical warfare plants, arsenals, shell-loading plants, synthetic rubber plants, high-octane gas plants, and many other modern fac-

(Continued on page 103)

The Public Debt Is a Real Debt

By DR. HAROLD G. MOULTON

IN this and in his preceding article, Dr. Moulton looks ahead, analyzes the trends, and makes a shrewd forecast of the ground where our postwar issues will be settled

THE PROPONENTS of the philosophy that the only hope for full employment and continuing prosperity lies in permanent deficit financing recognize, of course, that this means a continuous expansion of the public debt. But, they tell us, an internal public debt is "so different from what we commonly think of as debt . . . that it should scarcely be called debt at all." An internal public debt "has none of the essential earmarks of a private debt."

As a preliminary, it is desirable to clear up some possible sources of confusion about the public debt problem.

The answer to the question, "Must the budget always be in balance" is obviously *no*. The question is raised here only because it is frequently implied that those who are concerned about perpetual increase of the debt are adherents of "the obsolete conception" of a *permanently balanced budget*. It is, of course, generally conceded that, in times of war, public expenditures may have to run ahead of current tax receipts. Moreover, nearly all students of public finance agree, I believe, that, in times of depression and readjustment, public outlays not covered by taxes may be both essential and helpful in stimulating recovery.

As for prosperity periods, it has always been taken for granted that the budget should provide a surplus with which to reduce public debt.

Students of public finance agree that there is no necessity of reducing a public debt to zero. It is only necessary that the debt be kept well within revenue possibilities. Fiscal experts have always regarded it as wise to reduce the debt materially in easy



**Out of unlimited debt
will come inflation or
totalitarian controls**

times to have a margin of safety for possible hard times in the future.

Debt without danger

THERE are two circumstances under which the public debt might gradually expand without endangering financial stability.

First, if the Government floats bonds to finance a public enterprise which yields sufficient revenues to cover maintenance, operation, and replacement costs, together with interest on the Government's investment, the expansion of the debt need cause no concern.

Second, at a time when, because of private business expansion, the national income is rising and the tax-

paying capacity increasing, a country would obviously be able to support an increasing public debt. But prudent management still would suggest the importance of restraining the debt to provide an ample margin for future safety.

It has long been recognized and repeatedly pointed out that there is an essential difference between a domestic public debt and an external public debt. In the case of a foreign debt, the revenues collected from American taxpayers with which to pay interest have to be transferred to bondholders in another country. With an internal debt this is not necessary. This obvious difference does not, however, dispose of the issue whether an internal public debt is of any economic signifi-

cance. With these preliminary questions cleared, we are in a position to consider the argument that a domestic debt involves no dangers but has positive advantages. It will be necessary to scrutinize specific contentions:

The view that "a public debt has none of the earmarks of a private debt," and that "it should scarcely be called a debt at all" arises from the fact that the money collected as taxes flows back to the people as interest.

The same reasoning might be applied to the debt of a state or a city, if such debt were held wholly by its citizens. And, if we consider our states and our cities as a collective whole, all state and local public indebtedness could be regarded as not really debt at all. Moreover, if we view the corporations of the country collectively, their bonded indebtedness would not really be debt because the income they collect from the American people for their services is paid back to the people as interest. In this way we get rid of all debt problems.

In financial difficulty

ON second thought, however, it will be reflected that particular railroad companies or industrial corporations, or local governments, might find themselves in financial difficulty. Likewise, one may reflect that the federal Government might, under certain circumstances, find it impossible to meet its interest and other obligations. Thus the mere fact that, in all cases, the collection of revenues and the payment of interest "merely shifts money around within the economic system" has not, as historical evidence shows, eliminated the debt problem.

The contention that a domestic public debt has little significance because the income merely goes out of one pocket into another was extensively discussed after the last war. At that time the basic issue was stated by the present writer as follows:

"Moreover, since the particular individuals who pay the taxes do not usually receive back in interest anything like the funds they have parted with, the process involves a wholesale redistribution of wealth."

It is emphasized by the proponents of the unbalanced budget that "Every cent spent, public or private, becomes income for the members of our own society." This conception apparently

explains the statement of the National Resources Planning Board that costs are of no significance, that "doing the job pays the bill." Since the receipts are necessarily identical with the disbursements, everything is satisfactory: cost equals income; and income equals cost.

Note that this argument is applied not only to interest on the public debt, but to *all* public expenditures. The war does not cost us anything because every cent spent (within the country) is income to the American people. Note also that the statement includes private as well as public expenditures. Since the costs of private business are represented on the opposite side of the shield by income disbursements, no one need worry about costs.

The initial error in this proposition is that costs and income are *not* opposite sides of the same shield. The *costs* are costs to the Treasury; the *income* is income to the public. And the Treasury cannot get back all of its

vices it derives *revenues*—presumably enough to cover operating costs and interest, to provide for eventual replacement, and to yield an income to the Government. Such an outlay would impose no additional tax burden on the rest of the community. The enterprise is not only self-supporting but may even help support the Government.

Burden for taxpayers

NON-REVENUE-PRODUCING public works cannot cover their operating, maintenance and replacement costs, or interest charges. Hence they involve continuing costs which the taxpayers must bear. From a *fiscal* point of view, also, they involve continuing annual outlays.

But, it is contended, all the free services the Government provides can readily be made to take care of themselves by the process of expanding the nation's money supply and hence its taxable capacity.

When the government provides free services, some appropriate monetary expansion is justified. This would permit the collection of taxes sufficient to cover the expenses of operation together with amortization and interest charges.

This seems to say that if: first, we spend public money to build non-revenue-producing public works, to support the unemployed, and so forth; and then, second, issue an additional volume of money, the taxes will rise sufficiently to liquidate the costs. By what process and to whom the additional money (from which the additional taxes would be derived) is to be issued is not clear. Nor, apparently, is the fact recognized that, to carry the *continuing* costs involved, this *additional* income would have to be issued not once only but in

each succeeding year. The basic error in this thinking still remains:

The Treasury simply cannot get back in taxes, levied upon the additional income it distributes through its disbursements, as much money as it pays out.

This general problem may be illustrated by wartime expenditures. Such outlays, immediately speaking, provide as much employment, and generate as much current money income as any other kind of expenditures, public or private. But neither the munitions and supplies consumed, nor

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We have been told that Government spending merely shifts money from one pocket to another

outlays in the form of taxes. Hence there is no identity between outflow and inflow. The Treasury goes into debt.

The second error embodies the basic fallacy in the new philosophy of public expenditure and debt. The argument that all government expenditures, for whatever purpose, generate money income and thereby provide the means for liquidating the costs fails to take account of the differing effects of varying types of public expenditure upon *future income*.

When a government builds a capital enterprise which sells goods or ser-

Labor's Stake in Capitalism

By JOHN P. FREY

President, Metal Trades Department,
American Federation of Labor

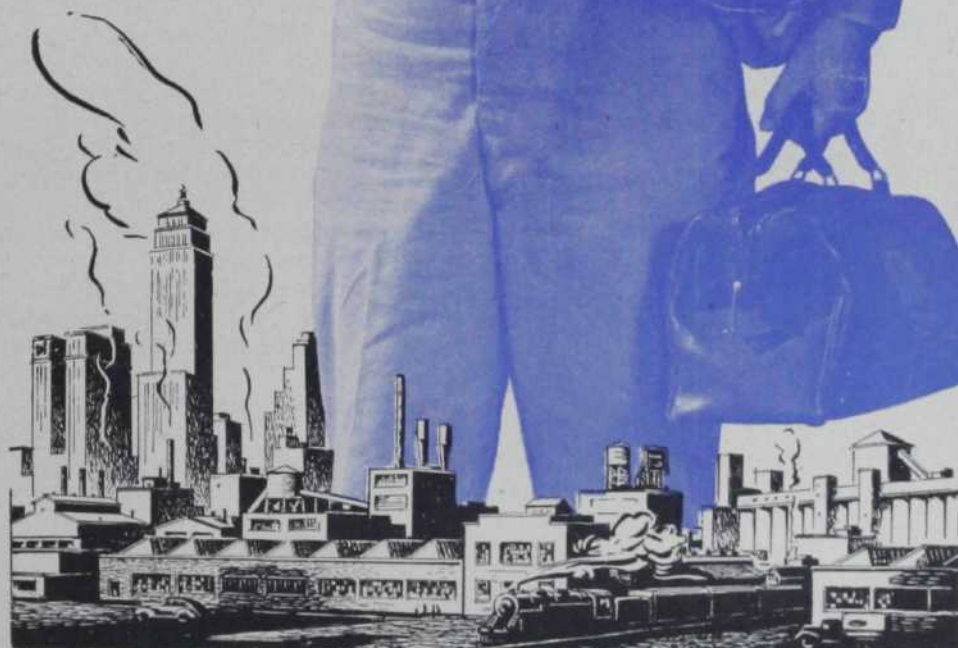
MR. FREY wrote his first article for *Nation's Business* in 1919 after returning from a study of European labor. He sees in our American system of economic freedom the worker's greatest opportunity for advancement

SEVERAL years ago the New York Legislature passed a law giving a nine hour day to a certain group of workers. The legislation came after years of political agitation. Then, after it had been in effect only a short while, the State Supreme Court declared it unconstitutional. The late Samuel Gompers used this experience to drive home his argument that the workers must not look to the Government for a betterment of their conditions but must bring it about themselves through organization. The Government in this instance had given and it had taken away. He organized these workers and they got an eight hour day by bargaining with their employers. They got it for keeps.

President Eric A. Johnston of the United States Chamber of Commerce has said:

"Wages and hours in public employment are fixed by public law. No group of government employees can overturn public law enacted by the Congress and backed by the Army and Navy. In any knockdown contest between a Government and a union, the union is beaten from the start."

He was emphasizing Labor's stake in the capitalistic system; he was pointing out the woe that would befall the worker if the Government took the place of private enterprise as the general employer. But he will get no quarrel from the American Federation of Labor on this score. I do not profess to speak officially for the Federation with its more than 6,000,000 members. I can speak officially for those 1,500,000 who make up the 15 international unions which comprise the Metal Trades Department. And I



Our boys, returning from the war, want to live under the private enterprise system of their fathers' making

think that my 44 years of service as an officer of the Federation gives me a rather extensive knowledge of what the members and officers think.

Although we have drifted a considerable distance from Gompers' philosophy of staying as far from the Government as possible, we haven't done this in furtherance of any definite policy; it has not been in line with any definite plan of getting the Government to do things for us. We have simply been part of an irresistible tide that has swept us all more and more into the arms of Government. The complexities of our civilization have forced us, just as they have forced Industry, to ask the Govern-

ment to do for us that which we find difficult to accomplish ourselves.

In recent years this trend has become more pronounced. We are not the only offenders. Industry and Agriculture have been even more prone to look to the Government to solve their problems. For every item of so-called labor legislation I venture to say you will find a hundred items sought by industry. We have our Wagner Act which, although it guarantees a worker the right to join a *bona fide* union, has, through administration, been a source of constant harassment to us. We have the wages and hours act. The original measure I

(Continued on page 70)

Commandos on

HOME-front adventures of a group of men whose responsibility is to keep the production lines moving at all costs—and who succeed in doing so in the face of obstacles that would make most people quit



"It's probably impossible, but get it done!" He caught a plane that night for Milwaukee

TRAFFIC on Highway 99 near the big Boeing West Coast plant stopped that day shortly before Pearl Harbor as a tractor dragged a four-motored bomber across the highway.

The crowd gaped at a plane that had the nose and wings of a Flying Fortress, the tail section of a Stratoliner. From the power turrets and stinger turret in the tail, they knew that this was the deadliest Fortress of them all. Fascinated, they watched the test pilot put her through two preliminary taxi trials, then sweep her aloft. Twenty minutes later he brought her back, his face beaming.

A group of bearded men stood among the watchers that day. The ship was their baby. Three weeks before, for a final burst, as a spur to the whole organization, they had resolved to let their beards grow until the new Fortress was a flyable bird.

Like doctors, they had nursed her through production. Did a blueprint develop a sour note in Fabricating? Was a part failing to arrive on time in Assembly? Was one department lagging because of unqualified personnel, inferior methods or other reason? They were there to spot the trouble and to help fix it. By actual pedometer count, they had individually legged it through the plant as much as 16 miles a day.

That day before Pearl Harbor, while the crowd cheered the successful test, the bearded men smiled quietly. They couldn't know the role this new ship was so soon to play. They

had kept their vow, done a job. They were delighted about that, and happy, too, to get the whiskers off.

Two hundred strong in Boeing, these men are typical of thousands serving today as spark plugs of American industry. They're called *expeditors*. The public knows little about them.

In the most gigantic production program ever known, jam-packed with seemingly insuperable obstacles, these men do the difficult, the unprecedented, the "impossible."

There was, for example, the urgent message Lockheed received from the War Department. "Those round red centers on aircraft insignia," it said, in effect, "they look like rising suns. We've got to get rid of them fast."

Spots go in a hurry

AN expeditor literally slashed his way through every routine in the organization. In two hours, instead of the days it would normally have taken, he was wiring Washington that, not only would the red spots be out on future planes, they were already out on existing, undelivered ships.

When one vital war plant some months ago had immediate need for metal planers, it was an expeditor who found two of them in a second-hand shop buried under so much scrap it took two days to dig them out. Eight months were saved.

When Westinghouse was strug-

gling to get hundreds of subcontractors to feed supplies smoothly into production lines in 25 of its plants, it was a force of expeditors who solved the problem so well that not one of those plants has had to close for a single day for lack of material or parts.

They're an astonishing lot, these men whose responsibility is to keep production lines moving at all costs. They come from all types of previous occupations.

In a propeller plant, one valued expeditor was once an insurance broker. He works alongside a seasoned business man who took his degree at Harvard and operated his own textile factory for several decades. In the same department, there's also a mercurial 22-year-old Irishman who never saw the inside of a college but who swung hammers for two years in the plant, then served a term in accounting.

Expeditors have professional kits filled with more aids for getting things done than a woman's vanity case. They take long chances, prefer to make mistakes rather than sit back and do nothing. If they get blocked, they go around. If they can't go one way, they try another. If they can't get what they need, they make something else do. No matter what stands in their way, they get the job done.

One morning some months ago in one of Detroit's busiest plants, someone made a jarring discovery. A shipment of key parts from a supplier in Waukesha, Wis., hadn't come in. Worse, the supplier hadn't even been able to start work on the order. By Saturday morning, if those parts hadn't arrived...

An expeditor—an ex-automobile salesman—drew the assignment.

"Get at least 25 of those parts back here by Saturday morning," he was

the Production Front

By LAWRENCE N. GALTON

told. "It's probably impossible, *but get 'em!*" That was at 11:50 A.M. Tuesday.

Within an hour, the expediter was on his way. He caught a plane, a train and a speed-breaking cab. His first stop was Milwaukee. There, somehow, he persuaded a plant to drop everything and hammer the forgings which the Waukesha supplier would need to make the parts. Hammering went on all night.

Next morning at Waukesha, the supplier admitted that he had never machined such a forging before. He didn't know how.

"Come on," the expediter said. He took off his coat, rolled up his sleeves, made tracks for the shop. First he

showed the workmen how to tool up. Then he devised a totally unconventional but superbly workable way to perform several machining operations at once to save time. And now, with sweaty face and grimy hands, he pleaded with the workers. "I can't tell you how urgent this is. You've just got to work 24 hours a day until the job is done."

"What the hell do you think we are, machines?" someone back in the gang demanded.

Then a big machinist up front broke in. "I guess the guy means it. And I guess it's important. I'll work."

"All right," said a second voice. "But what about a furnace to treat the pieces when we finish machining

them. Where you gonna find one?"

"I'll find one," the expediter said. He found two.

Late next night, after seeing the first finished pieces through heat-treating, he loaded them aboard a truck, rode down to the railroad station, put them on an express car, then grabbed a sleeper himself. Next morning in Detroit, he located the car, unloaded the parts onto another truck and rode with them out to the plant. He arrived on the nose—at 8:30 Saturday morning. And not with the impossible 25, but with 150.

One prime reason why we've been able to turn out such quantities of weapons so fast is subcontracting. Expediters have helped make much of that possible.

Recently the general manager of a company that formerly made milk cans called up the Glenn L. Martin Co. "Couldn't we convert to making wing spars for your bombers?" he wanted to know.

Bombers need plenty of wing spars so a Martin expediter was soon over at the milk can factory. One look

"Come on," said the expediter. He took off his coat, made tracks for the shop and showed the workmen how to tool up for the job



showed him that its facilities weren't right for making wing spars. But he looked some more.

"You can make exhaust stacks, if you want to," he told the manager.

"We want to."

Today, with the help of that expediter, the milk can factory is turning out those vital parts for bombers.

No washers, no guns

TALK to Martin officials and they point out that they have 40 expediters roaming the country at all times in search of subcontractors. They've made it possible for Martin to farm out 30 per cent of all work on three lines of big bombers built at Baltimore.

But setting up a subcontracting system is one thing, making it work another. Without expediters to shoot trouble, the whole system would probably topple. That's because everything depends on getting an even, on-time flow of parts to the final assembly lines.

Take the case of a company producing subassemblies for guns. With-

that the subcontractor couldn't get delivery on machines needed to make that particular type of washer for at least a month. So the expediter had to find another company which could make the washers temporarily provided the specifications were changed slightly. The expediter sold the Army on changing them.

But now it developed that, to get all the washers he needed on time, he had to find still another company that could make the washer machines fast. If it sounds like a merry-go-round, that's just what it was. There were two weeks of solving one problem after another. But, thanks to that expediter's work, finished guns were going to the armed forces a full month sooner than otherwise would have been possible.

The roving expediters of Curtiss-Wright seldom visit the home office but "cross-country" from job to job. Getting an S.O.S. from the home office, they hop a plane to the lagging plant. They may camp there for hours or days until the snag has been untied, or depart in search of missing materials or tools.

forgings, lost on its trip east from Wisconsin. He had until the following midnight to produce the forgings at the plant where they were required. By invoking the aid of a college fraternity brother in the Midwest, the expediter located the lost freight car in Indiana, persuaded the Erie Railroad to put a special car through, and met it in New Jersey where he conveyed it to the plant, arriving just 20 minutes ahead of the night shift and avoiding three days' delay.

It's when it comes to finding "impossible to find" machines and materials that expediters really pull rabbits out of their hats. Time after time their treasure hunts have saved shut-downs and long delays in getting weapons to the fighting fronts.

One company recently needed a metal-working lathe. It couldn't get a new one without an impossible long wait. Then an expediter located a used lathe in a factory several hundred miles away. He boarded a train only to have it get snowed in. He hired a horse and sled and drove 20 miles. But the factory couldn't let the lathe go just yet; he'd have to wait. He couldn't wait. So out he went on another hunt. He talked to local bankers, business men, people on the street, in buses and in bars. Finally he found his lathe in the cellar of a wealthy banker who was using it for his hobbies.

Set fires under people

VITAL as are the jobs the roving expediters do, no less important are those done by the inside men who set fires under people, methods and operations within their own organizations.

The Weatherhead Co. in Cleveland, for example, making parts for planes, jeeps, boats and tanks, has 15 men trained in all the mysteries of production who guide parts and assemblies through the factory.

At 10 o'clock one morning last spring, a representative from one of the country's largest tank producers charged into the Weatherhead plant. He was desperate. There had been a change in tank engines. That meant new fuel and oil lines were needed. Twenty-five sets were required at once.

The Weatherhead production manager and three expediters sat down with him. Each new set required 11 different kinds of hose. Some ends were in stock but eight types had to be made from scratch. The group tore through the new specifications. In two hours they had decided on the best possible combinations for hasty

(Continued on page 81)



He boarded a train only to have it get snowed in. So he hired a horse and sleigh and drove 20 miles

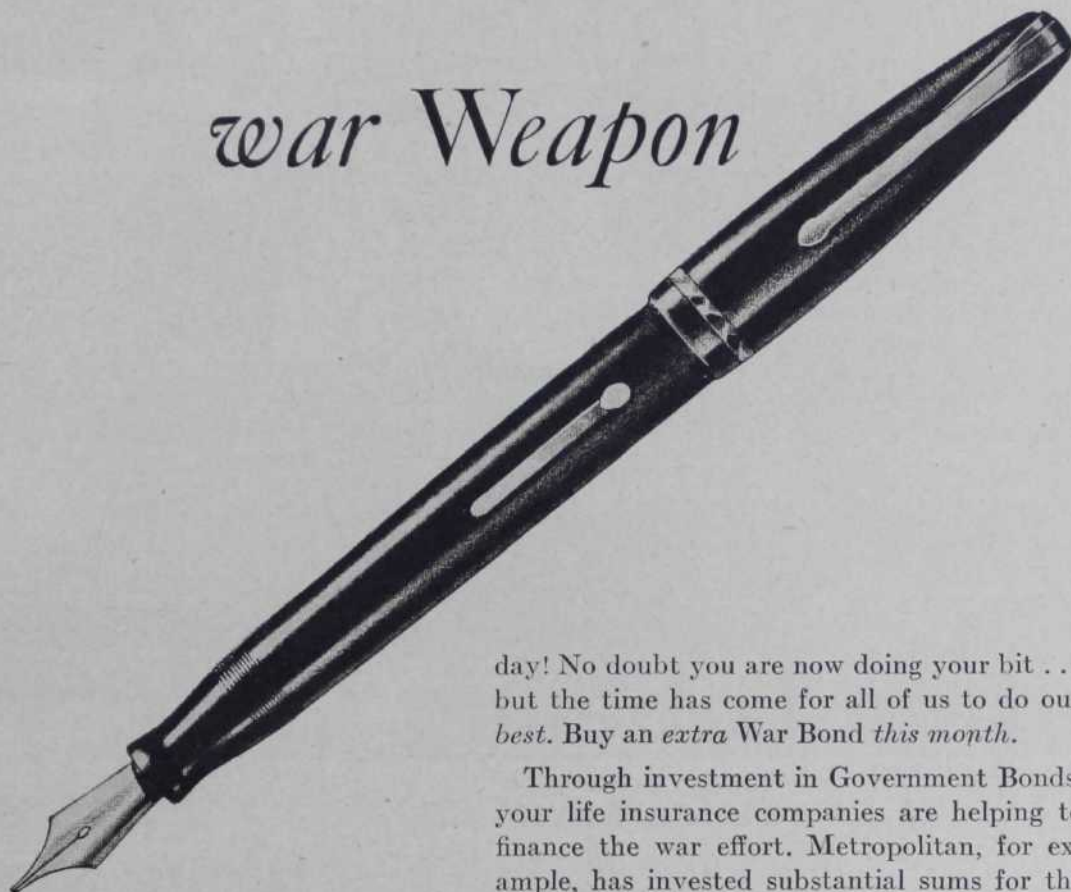
out two little brass washers costing just a few cents each, there could be no gun. The subcontractor making the washers insisted it would take six weeks to deliver them. He had to be sold on the critical importance of those washers. An expediter sold him on that.

Next the expediter had to get priorities for brass for the manufacturer. When that was done, it turned out

In one case, a subcontractor had ordered grinding equipment needed to fill a Curtiss-Wright order but the equipment had not been delivered. To save time, the expediter removed the consignment to a plant 150 miles away for one single operation, then policed it back to the subcontractor for completion.

Another Curtiss-Wright expediter recently set out to find a carload of

Picture of a mighty war Weapon



THAT OLD SAYING about the pen being mightier than the sword was never truer than it is today.

The swords of modern war are tanks and planes and ships and bombs. These things cost money . . . huge sums of money . . . and that makes money the first requirement in fighting a war.

Every time an American opens up a fountain pen and writes a check to pay taxes, or to buy a War Bond, or to sign a pledge to put at least 10% of his pay into War Bonds, that pen is helping to make possible the swords of modern warfare.

Your Government not only can't fight a war without money, but Victory will require *all the money you can spare!* And your Government needs that money *right now!*

Buy all the War Bonds you possibly can. Buy them regularly by making every pay day Bond

day! No doubt you are now doing your bit . . . but the time has come for all of us to do our *best*. Buy an *extra* War Bond *this month*.

Through investment in Government Bonds, your life insurance companies are helping to finance the war effort. Metropolitan, for example, has invested substantial sums for the benefit of its policyholders. Metropolitan's Home Office and Field employees are also buying War Bonds by direct purchase as well as through the Payroll Savings Plan.

Our boys are giving their lives . . . the least that we can do is to lend our money! U. S. War Savings Stamps may be purchased from any Metropolitan agent, or at any Metropolitan office.

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Reformers would substitute alphabetical anonymity for the protection which private brands give consumers

Grade-Labeling Cries "Wolf!"

By LAWRENCE SULLIVAN

BUSINESS never has been able to measure the value of good will. But it is the "priceless ingredient" of every commercial relationship. American management spends hundreds of millions a year to build and maintain cordial public recognition and acceptance of names, brands, trade-marks and service slogans. The story still is told of the young woman tourist from Omaha who, on first seeing the Rock of Gibraltar, hastened to the ship's captain to ask, "But where's the Prudential sign?"

Yet one school of eager young men and women in Washington insist that such values are not real. Indeed, brands and trade-marks are symbols—they would have us believe—of economic waste. Much better, they say, is grade-labeling. Put peaches, for instance, in cans by government standards, let every can be the same and save the cost of labels, advertising, and brand acceptance.

After being applied to foods, the system could be extended to textiles, to shoes, leather goods, stockings, underwear, automobiles, tractors,

REJECTED in peacetime, a reform attack on national advertising and competitive selling renews itself, this time disguised as a win-the-war effort.

watches and radios. As far as the imagination can reach, no bureau need ever consider its job really finished.

This agitation for grade-labeling is not new. It has been going on for some 20 years and has been an organized and lucrative business in the United States for 15 years. Consumers clubs have been organized in all the larger cities. The program sold to the membership usually centers on political pressure for national grade-labeling. In some cases, the membership fee is as high as \$1 a month. The NRA experiment afforded a field day for such pressure groups. Attempts were made to enforce federal standards of inspection and labeling in several industrial codes under the protective screen of emergency recovery programs.

When NRA expired, the whole grade-labeling bureaucracy moved bodily to Agricultural Adjustment

Administration, where it thrived for a time as an emergency instrument aiding agricultural recovery. With the liquidation of AAA, the whole effort was transferred to the Temporary National Economic Committee. There a new appropriation sustained the agitation for almost three years. When TNEC passed out of the picture, the machine was transplanted to OPA.

Through all this history, grade-labeling was constantly under the wing of Leon Henderson. Henderson first won his way to the top in NRA. He was later Executive Director of TNEC. Then he moved to OPA. Testifying before the House Banking and Currency Committee in August, 1941, Henderson was asked if the objectives of the Price Control Act were not in many cases parallel with those of NRA. He acknowledged that the administrative approach often was sim-



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"Tomorrow night — Fort Knox !"

"We're a little late tonight, folks!

"Just time to remind you that this broadcast has come to you from Great Lakes Naval Training Station, outside Chicago. Tomorrow we'll be with the boys at Fort Knox, Kentucky. 'Til then, this is Harry Von Zell saying—*Good Night!*"

Then a tired troupe of entertainers hurries to the Pullman car that's been "home" to them for weeks.

Like scores of other radio, screen and stage stars who are giving time and talent so generously to brighten training camp routine, these folks travel almost constantly. So do huge numbers of civilians engaged in war activities. And thousands of service men on leave.

In spite of this record-breaking traffic, Pullman's usual high standards could be

maintained if all sleeping cars were in regular passenger service. But they aren't. Many have an even *more* essential war job. Made up into special troop trains, they move an average of almost 30,000 men in uniform a night.

So, with *more* people seeking space in *fewer* cars, "going Pullman" is not what it was in peacetime. Fortunately, most passengers don't seem to mind. Hard-pressed by long hours and heavy responsibilities, all they ask is the rest and relaxation that they get *despite* wartime crowds and inconveniences.

And that's *so* important to *so many*

thousands of people that when *you* plan to "go Pullman", will you please:

Ask yourself: "Is my trip *necessary?*"
If it is, then . . .

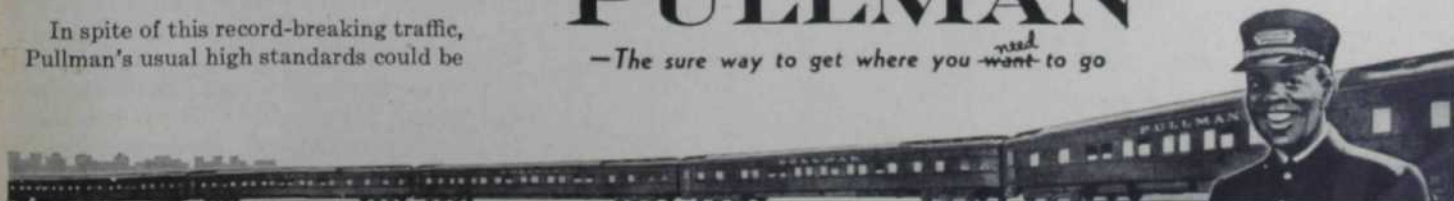
Ask your Ticket Agent on which days trains may be least crowded on the route you want to take. Try to go on one of those days if you can.

Travel light and give yourself and fellow passengers the room that excess baggage would take.

Cancel promptly, if your plans change, and make the Pullman bed reserved for you available to someone else.

PULLMAN

—The sure way to get where you ^{need} want to go



ilar, except that NRA sought to *advance* prices, while OPA aimed to hold them down.

This testimony throws a bright light on the real nature of the grade-labeling movement. Ten years ago it served a peacetime emergency as a measure to advance prices. Now it would serve a war emergency as a measure to keep prices down! Times may change but there are always plenty of reasons why the federal bureaus should take over the basic functions of private enterprise.

In its latest manifestation grade-labeling was thrown before Congress last February when Representative

Charles A. Halleck, of Indiana, sponsored a resolution directing the House Interstate Commerce Committee to investigate all rules and regulations of the emergency agencies which appeared to be "an attempt to change our domestic economy along lines not authorized by Congress."

Under this resolution, the Committee has inquired into pricing, simplification, and standardization rules proclaimed by OPA for foods, women's hosiery, work clothes, drugs, cosmetics and underwear.

"It has been obvious in recent years," said Representative Halleck, "that certain forces which aim at

overhauling our whole economy have been set in motion in Washington. This school teaches that men and business must be made subservient to an all-powerful bureaucracy. If it has its way ultimately, this bureaucracy will dictate the color of your toothbrush, the length of your trousers, the number of stitches per inch in the hem of your undershirt.

"I have watched this strategy over a period of years. The attack most often has been indirect. But, under one camouflage or another, this group systematically has attacked our American business system at two points—national advertising and trade-marked brand names. Why always at those same two points? Because the minds which direct these forces recognize that brands, good will and advertising are the keystones of our free enterprise system. Cripple those, and you cripple the whole system."

Many administrative difficulties in OPA flow from the fact that both Congress and the business community suspect the staff of advancing collectivist reforms under the screen of necessary war controls. Such fears appeared to be confirmed for the Committee when it discovered that A. C. Hoffman, a ranking officer in the Food Price Section of OPA, had written TNEC Monograph No. 35, which advocated curbs on advertised food brands.

Dislikes advertising

"ONE of the aspects of modern food distribution which the writer finds much to his dislike is the growing expenditure of money for brand advertising of food products," Hoffman wrote in his TNEC report (p. 71). Many packers and canners, therefore, suspected that Hoffman's rulings in OPA were leading relentlessly to the gradual elimination and suppression of all quality brands and price differentials. Soon after these facts were spread upon the Committee's record, Hoffman resigned from OPA to transfer back to his old spot in Agriculture. Prior to TNEC days, he had been Principal Agricultural Economist in the Bureau of Agricultural Economics.

Representative Leon H. Gavin, of Pennsylvania, presented before the House Committee his own detailed investigation touching the international ramifications of the economic planning program as developed in federal policies during the past decade. In his opinion, the program which includes grade-labeling was sponsored originally by the British Fabian Society, (Continued on page 46)

Why Consumers Don't Want Grade-Labeling

THE SPONSORS of grade-labeling have claimed a big public demand for it. Congress has found no evidence to support their claims. . .

Manufacturers have done a good job of building up confidence in their nationally advertised brands, have earned the respect of the public.

Grade-labeling requires oversimplification. It ignores such subtle factors as style, appearance and flavor.

Grade-labeling would gradually cut quality. To compete on a cost basis under grade-labeling, the manufacturer would have to work downward to the lowest standard permitted in each group.

Grade-labeling could not be uniform. A product on the borderline might be classed "A" by one inspector, "B" by another. High-quality "B" could be wholly as good as low-quality "A". The customer, looking at the symbol, could not tell whether the product was near the top or the bottom of its grade.

Grade-labeling would be cumbersome to administer, expensive to enforce. The added cost would be tacked on to the customer's bill.

Regulations under the Food, Drug and Cosmetic Act already insure purity and protect health.

TOUGH FORGINGS FOR A TOUGH OUTFIT

Moving at high speed over all sorts of terrain, with blazing guns that will destroy any tank made with a single hit at long range, or demoralize other enemy ground forces with rapid fire—that's what America's new tank destroyers are doing in combat.

From every standpoint, it's a tough outfit. Picked men—tougher than any Prussians—man our tank-killers. The going is plenty tough—over rough ground uphill and down, faster than artillery has ever been moved before. Naturally, the parts that take the most abusive punishment are the toughest forgings, properly heat treated for ultimate strength.

At Kropp Forge, we take pride in the quantities of super-tough forgings which we are producing for America's tank destroyers, planes, ships, ordnance and essential war machinery. Full shifts, every week, the hammers in our greatly expanded plant are resounding in our war effort.

The inquiries of armament and machine tool builders for forgings of every type are solicited.

Kropp Forge Company

Makers of Drop, Upset and Hammer Forgings for Ships, Guns, Planes, Tanks, Ordnance and Machine Tools

"World's Largest Job Forging Shop"

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Engineering Representatives in Principal Cities



KROPP



Proudly we fly the Army and Navy "E" flag and stars, awarded and re-awarded for excellence and proficiency in the production of war materiel.



AUSTIN C. HOFFMAN came to Washington from a college campus to help the Government establish its position on vital, current economic questions

A NEWSPAPER man recently called A. C. Hoffman a "policy-maker," and the Food Distribution Administration's consultant on food price problems does not deny the impeachment.

"Yes, I'm a policy-maker," he says without taking his feet off his desk and, if you will put your feet there, too—an informality his friendliness encourages—he will tell you about it.

Moreover, he will discuss without heat the kind of policies he makes, or any other current topic. His small head under the wavy black hair is packed with varied information in addition to food distribution theories and his full lips spread in a ready grin at none-too-subtle digs about himself or policy-makers in general. He is five feet, ten, weighs 160 and looks lighter.

"We are told," we said to Mr. Hoffman, "that any 1943 policy-maker must be a Harvard man. He will be under 40. He will be intelligent, well-informed in his particular field and, most likely, will have written a TNEC

What It Takes to Be a Policy-Maker

monograph. Most important of all, he must know Leon Henderson."

"I know Leon," Mr. Hoffman answered. "He hired me when he was getting up the OPA organization."

"Harvard?"

"Yes. A Ph.D."

"Your age?"

"Thirty-eight."

"And you have written—?"

"Well, I wrote Monograph No. 35 for the TNEC."

Mr. Hoffman's latest chore of policy-making was with OPA which he joined in July, 1941, as "Principal Food Economist." Soon afterwards he was advanced to head of the Food Price Division

where he served directly under J. Kenneth Galbraith who was directly under Leon Henderson. That put him pretty definitely on the general staff in one of the most hectic periods in America's retail history. He has never, he admits, been on the firing line.

Austin Clair Hoffman was born January 6, 1905, on a large farm near Abilene, Kan. "With a Kansas silver spoon in my mouth."

Hoffman, *pere*, was—still is—a prosperous farmer who paid his son's way through Kansas State College and permitted his disappointment to take no violent form when the student returned more interested in studying economics than in raising wheat.

ThesoncontinuedhisstudiesatIowa State College where he won a \$300 fellowship, and at Harvard where he took his Ph.D. before moving on to the University of Wisconsin as Professor of Agricultural Economics.

At Wisconsin, he continued his food distribution studies and put some of his ideas before the public in an arti-

cle which appeared in *The New Republic* in the summer of 1931. It was a think-piece on what should be done about farming.

"Most of my recommendations have since been carried out," he says, but smiles when you ask if they were right.

Other excursions into literature brought only rejection slips. In January, 1934, A. C. Hoffman came to Washington as an agricultural economist in the Department of Agriculture. Almost at once he found himself sitting in on the births of new policies. The thoughts he brought to these accouchements he set down in the TNEC Monograph written in 1940.

In that 174-page document one may read, on page 59:

"It is evident . . . that many, though not all, the expenditures for advertising and competitive selling serve no real use to consumers . . ."

Would cut out advertising

ON PAGES 71 and 72: "One of the aspects of modern food distribution which the writer finds much to his dislike is the growing expenditures of money for brand advertising of food products. Among the chief offenders are the big processors and distributors who do not have assured retail outlets and who use this method to stimulate sales of their products."

Also on page 72: "The 12 per cent price difference in favor of the private chain brands thus gives a rough measure of the savings made possible by the elimination of advertising and sales costs usually incurred on nationally advertised goods."

Further along he states: "It is needless to remark that the characteristics of modern capitalism utterly belie the assumption of full employment," and "usually we cling to old economic patterns long after they have become outmoded, even at some sacrifice of well being."

Elsewhere Mr. Hoffman finds it not without significance, "That a growing number of people are beginning to think in terms of public utility status

(Continued on page 54)



One of a series illustrating Cyanamid's many activities.

"I'm out to get a Saboteur!"

A corncrib chock-full of big, golden ears is a mighty good sight to see these days when food is so precious. Unfortunately, it also looks good to the world's worst saboteur...a saboteur who does more than 200 million dollars' worth of damage every year in this country alone, mostly to food crops!

This saboteur is the common rat, against which man has been waging a relentless battle for centuries. Thanks to a slate-gray powder, however, the tide of this battle is turned in favor of man. The powder is CYANOGAS*, a powerful rodenticide and insecticide developed and marketed by American Cyanamid. Not a bait, CYANOGAS acts on a different and much more effective principle. When dusted into burrows and other hiding places, it

releases hydrocyanic acid gas, which kills rats, mice and other vermin the instant they get a whiff of it. It is so effective that farmers all over the country are using it to rid their lands of these pests and thus save millions in vital food supplies.

In other places, too, a successful battle is being waged against pests with this gas. Wherever food is stored, processed or transported, Cyanamid's hydrocyanic acid gas is used in one form or another to guard against loss and damage. It not only kills rats and other pests but also their disease-carrying lice and fleas. Thus its value is measured in terms of lives saved and higher health standards. This is another inter-

esting example of the effectiveness of Cyanamid's chemical service in safeguarding the well-being and property of the American people. *Reg. U. S. Pat. Off.



**American
Cyanamid Company**

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.



What's he got that you didn't have?

AMONG MANY THINGS already certain are endless human comforts made possible by plastics... shoes without leather... hats without felt... new kinds of suit and dress materials, as well as an almost endless number of home conveniences, that "neither moth nor rust doth corrupt."

You, perhaps, think of plastics as substances which can be molded into articles such as the toy in the child's hand... or into a telephone hand set... or colorful kitchen ware. But imagine beyond that. Imagine man-made materials which can be made as strong, pound for pound, as metal... or which can be spun as fine as the most delicate fibers. Imagine substances which can be made as clear as crystal... or as colorful as the rainbow... as elastic and flexible as rubber... or as rigid as stone.

Imagine materials which can be made acid-resistant or weather-resistant... shrink-proof, warp-proof, insect- or mold-proof. Imagine materials which are new substances in themselves, and which also transform familiar substances like wood, cloth, paper, leather, and even glass into new and more useful materials. Then you will

begin to see what plastics can mean in the way of better houses, better cars, better clothes, better food containers... for your child... and for you.


The research which has characterized both BAKELITE CORPORATION and CARBIDE AND CARBON CHEMICALS CORPORATION, Units of UCC, has enabled them to show the way in the development and application of plastics and resins.

Resins and plastics, developed during the years before the war, are proving of extreme importance in essential activities of today. BAKELITE and VINYLITE resins and plastics help to insure the unfailing performance of battleships, aircraft, and tanks. They also extend the service life of military clothing and equipment, and hospital and surgical supplies. They are serving on all fronts.

These resins and plastics, and the new uses for them which are being developed today, will be important in the peace to come. They are among the things which will make a better world for you.

BUY UNITED STATES WAR BONDS AND STAMPS

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National Carbon Company, Inc.

INDUSTRIAL GASES AND CARBIDE

The Linde Air Products Company
The Oxweld Railroad Service Company
The Prest-O-Lite Company, Inc.

PLASTICS

Bakelite Corporation
Plastics Division of Carbide and Carbon Chemicals Corporation

Capital Scenes... and What's Behind Them



Not complacent; just plain mad

WHEN our Congressman escaped from his vacation in his home town and got back to the safe shelter of Washington he said he is smarter than he has been for some time past. And worse, scared. Walking down Main Street, he said, was like running the gauntlet:

"Indians on both sides with knives."

He said he never knew so much time to pass in two months. He felt that he aged years every day on his walk down town. He was not going to generalize, he said, about how people felt in other parts, but the voters and mothers met him with flame-throwers. He would make just one statement:

"Anyone who says this nation is complacent is a liar. It isn't complacent about the war. It isn't complacent about the goose-grease in Washington. Maybe those who charge it with complacency think we should be scared. We're not—never have been—won't be. But we're getting pretty tired of being screamed at by folks who think we ought to be going into a nervous breakdown. Fooey."

The things we're not told

IN his district, he said, the people are wanting to know what is going on and why they are not being told the facts so they can make up their own minds. They are not asking for any preview of military strategy, he said. The American people have more sense than that. But they want to know what we have been committed to and how much and by whom and when. It seems to some of the people in his district that we have been getting a pretty hearty pushing around in some of these international affairs. They may be wrong. They admit it. They agree that the things that are being done may have been inspired by an unearthly wisdom and a supernal charity. Only they want to be taken into somebody's confidence and, if they are not, a lot of congressmen may not be coming back to Washington.

Cheapness out for duration

THEY feel that this is their country, he said, and that they elect men to work for them and not to boss them. His voters were pretty pointed about this. Since he got back to his foxhole in Washington he has talked to other congressmen

from the Middle West. Most of them report that their constituents are approaching the frame of mind they enjoyed in and about 1930, when mortgagors found it advisable to push mortgagees around with hayforks. They are not politically minded, he said. They think that partisanship at this time is indecent. They want the affairs of this country conducted with a view only to the country's good—mark the word "only"—and out in the open.

"They're hot as horseshoes in a forge."

He picked up some concrete evidence in support in a talk with Graham Patterson, publisher of the *Farm Journal*. The *Journal* tries to put facts before farmers. Just that. Just facts. Hard facts. The circulation has been going up so fast that today's subscriber will not get his first number of the magazine before January.

A lesson in arithmetic

ONE of his constituents approached him with a horridly false air of *bonhomie*:

"Congressman," said the farmer, "if I had 40 sheep and the dang dogs killed seven of them, how many sheep would I have left?"

The farmer wouldn't let him reply:

"Down in Washington you people have been figuring that I would have a hell of a lot of sheep left and next year every wether would have four lambs. Think it over, Congressman. It ain't so."

Thermite in the teacup

HE thinks the congressional session now beginning may be the hottest and most significant since Civil War days:



"Think that over. The First War Congress gave everything to the winning of the war. The Senate debate over the League of Nations did not raise the national temperature greatly. Congress was reaching for the old soothing syrup during the first years of the New Deal. Anything that Tommy and Benny and Harry wanted was good enough."

"Now," said the Congressman, "we're in the hang-over hours. Flashes of blinding light mixed with nausea."

"Now," said the Congressman, "we're in the hang-over hours. Flashes of blinding light mixed with nausea."

Regardez, J. C. O'Mahoney

HAVE a look at Senator Joseph C. O'Mahoney, for instance. A Democrat by birth, training and election. Crisp, sharp, able and full of fighting blood. If a man

knocked him down and he couldn't get up he'd gnaw the man's ankle. Has a 50-foot bookshelf filled with his own senatorial committee's reports on what was wrong with business.

"Now Joe has discovered that in the past ten years the Executive branch has issued nearly 4,000 orders which affect every phase of life. The regulations issued under them by unnamed, unknown, unidentified bureaucrats fill 20 volumes. They are Executive 'laws' which Congress never heard of until they were published."

U. S. Senator J. C. O'Mahoney, (D. Wyo.) says these things are the pattern of arbitrary power, the characteristic mark of totalitarianism.

How about our ships?

IT is no doubt all right, said the Congressman, to lend England 20 brand new ships each month. England has the seamen we lack. But after the war England will want a mercantile navy. So will we. The country without ships will be afoot in the desert.



"Under a clause in the agreement the President can, if he desires, give those new ships to England and leave us with the slow ten-knot Liberty ships. Consultations are going on right now as to which nation shall have what."

He said he is not complaining about what may be done. But the folks back home want to know what is being done. They are not being told anything. They vote and they pay taxes. He does not know either.

What can be done about it?

HE does not know what Congress can do about it. Just for an example:

"It leaks out now and then that the Executive has entered into agreements with other nations. Not treaties, as directed by the Constitution. All in secret."

A peace agreement might be made in the same way. No peace table, no publicity, no discussion by the people. The tactics of "the smoke-filled room", of which we once heard. Except, said he, the smoke-filled room was in harmony with American traditions. Reporters were coiled four deep on the hall carpet. They knew who were in the room, all about each man, and all about the processes. The affair was as clandestine as one of Tommy Manville's marriages.

The voter's cold grey eye

HE has been trying to explain, he said, during what was falsely represented as a vacation for congressmen, that not all of his derelictions have been his own fault. His constituents, he said, should have taken an interest in what was going on and checked up on him. But they did not.

"Fact is, us Americans have been so much interested in our own affairs that



Tree-top low, an Allied fighter plane roars over Occupied France. Target . . . one of Hitler's supply trains. A blast from the plane's cannon . . . a well-placed bomb! Below, another enemy train lies wrecked — another monkey wrench has been thrown into the machinery of Hitler's tottering railroads.

Flying Fortresses . . . high over Germany. "On course . . . On target . . . Steady . . . STEADY . . . BOMBS AWAY!" Far below, bombs crash on railroad shops and yards of a vital Nazi transportation center. Another monkey wrench has been hurled into the most vulnerable cog in Germany's war machine. This is one way to use a monkey wrench.

The emphasis the Allied High Command places on destruction of Axis railroads, underlines the importance of America's railroads to our own war effort.

Here at home on the American railroads, the monkey wrench plays a different role — a vitally constructive role.

Last year, Norfolk and Western's busy shops made heavy repairs to 4,734 coal cars, built 17 locomotives, repaired 43 locomotives for other railroads, and completed 33 orders of war equipment for war industries, and the U. S. Army and Navy . . . plus maintaining its equipment at a high standard.

This way of wielding the monkey wrench provides the transportation that is vital to the production of American planes which are hurling monkey wrenches of destruction from the skies over Europe to blast Hitler's twisted dreams.

Norfolk and Western Railway

PRECISION TRANSPORTATION

BUY MORE WAR BONDS

we haven't been watching the indicator."

He thinks the voters' eyes are fastened on these boys who have been running sticks along the constitutional picket fence. And on him, the Congressman. From now on he's got to make good.

Not helpless; only careless

THERE is a young man in his district, the Congressman said, on whom he must keep his eye. The young man has been making talk about the sissiness of Congress.



Now that Congress has waked up, says the young man, it makes him think of the punk prize fighter who crawled out of the typewriters to shout into the mike:

"I fought a good fight, Ma, but I was robbed." Congress could have put an end to the executive encroachment on its constitutional status but it let the reins slip through its hands. When congressmen went home to have their political dynamos rewound many of them felt that if they were to dig into the executive records and find out what promises had been made to how many nations they might in some vague way interfere with the war effort.

The pitch is getting hot

THE Executive, he said, signed an agreement with the nations that have been getting aid from us, which pledges that American fingers shall be well buttered when Distribution Day comes. In this it is promised that we will do whatever is necessary:

"To promote mutually advantageous economic relations."

The other nations promised the same thing, of course, but it looks like the United States will be about the only nation that will still have something to give away when the war is over. That agreement takes in all the territory there is. Under it our money, property, tariffs, and lands might be given away. The immigration door might be propped open. He thinks that agreement will be taken out and looked at again. It is not, his voters think, an impediment to the war effort if we try to hold on to our shirts.

The movement has started

THE Senate Committee on Foreign Relations disavowed that agreement by a unanimous vote:

"So what? So nothing. The committee might have been cooing into a barrel."

The members of the committee, he thinks, then dusted off the Constitution and the Bill of Rights and began to sit up nights with their thumbs on their arteries. Then the State Department let it be known that it had arranged the draft of an agreement for postwar relief and rehabilitation. In one section each signatory nation pledged:

"Its full support within the limits of

its available resources and subject to the requirements of its constitutional procedure through contributions of funds, materials, etc.—"

The Senate Committee stopped that. Vandenberg (R., Mich.) told the story. It is understood that the Executive has agreed that future plans for postwar giving and loving shall be passed on by Congress.

A queer lot of loyalties

CONGRESS has been loyal to Hull, Hull has been loyal to the President, the President, so far as known, has been loyal to Hull. But no effort has been made until recently to cork up the amateur diplomats. Hopkins has interfered with the State Department. Sumner Welles, who is not an amateur, has run crosswise of Hull's policies. Nelson Rockefeller and Henry Wallace—until Wallace was shushed by Mr. Roosevelt—and Davis and Sherwood of the OWI have uttered sounds that the unwary could have mistaken for authorized statements of policy.

The President warned neutral nations not to give refuge to war criminals. It was a swell idea, said the Congressman, but the neutrals got pretty sore about the invasion of their neutral rights. The Treasury issued "war" money for use in occupied territory, without bothering to get congressional assent. Germany bought up all the silk stockings and *Parfum d'Sweet Women* in Paris with the same kind of currency. Redemption value \$10 a long ton.

No one believes Hull would have assented to acts which defy law and the Constitution and cause the congressional hackle to rise if he had been consulted. The Congressman thinks an effort will be made to get a lot of things out from under the stone of secrecy in the coming session. Congress, he said, is with Hull. Watch Hull.

Meaning of a word

WHEN the orators at Washington talk about the "complacency" of the nation some of them merely parrot what other folks say; some know no better; some are dragging a red herring:

"The more we fasten our eyes on the war," he said, "and the less on the failures in Washington, the less blame we will put in administrative laps. That's the shadow of 1944."

His voters in his district are looking at these things, anyhow. They might, mind you, approve of everything that has been done or planned. But, if they are not told about these things, then they are just pushovers. He's damned if he thinks they are.

Herbert Covey

THREE WAYS

to get more out of your Burroughs machines

USE ALL SHORT-CUTS

Make sure operators are thoroughly familiar with and are using all of their machines' automatic features, keyboard controls and other special time-saving advantages. Write related records as one operation. Obtain statistics and figures for reports as a by-product of regular posting routines.

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Right now you can arrange for regular, periodic inspection, lubrication and adjustment of your Burroughs machines, to safeguard your office from emergency repairs and the delays they entail. A standard Burroughs Service Agreement provides this efficient protection at a moderate, predetermined cost. All work is guaranteed by Burroughs.

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Your machines will produce more and better work if you use Burroughs carbon paper, roll paper, ribbons and other Burroughs supplies. They are manufactured to the exact specifications determined by Burroughs' experience. They are economical, too, with 10% to 40% discounts for quantity purchases.

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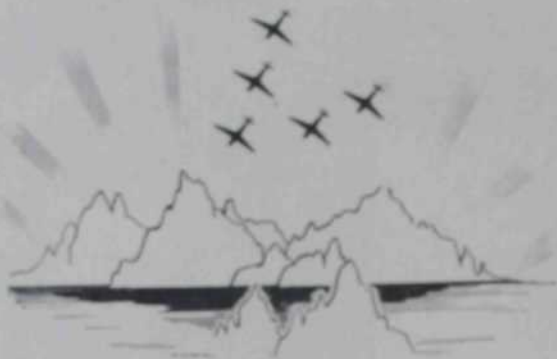
MANUFACTURING FOR WAR

The manufacture of aircraft equipment for the Army Air Forces, and the manufacture of Burroughs figuring and accounting equipment for the Army, Navy, U. S. Government and the nation's many war activities, are the vital tasks assigned to Burroughs in the Victory Program.

One of America's largest manufacturers of Aircraft precision parts discovered that the special lubricating grease in his instruments failed in extreme climates. The grease would freeze in Alaska—melt in the Sahara.

Many organizations were called in to help break the bottleneck, yet little progress was made . . . until Cities Service Technologists who were advised of the problem immediately produced the required lubricant.

How did they do it? Months before, Cities Service Research Technicians, on special assignment, had developed for this very purpose a temperature-resistant lubricant for the Army Signal Corps.



WHEN IS A PROBLEM... NOT A PROBLEM?



Frequently a problem is not a problem at all—its solution already may have been found for another set of similar conditions, as in the foregoing instance. In exploring the fields of electronics, chemistry, mechanics and metallurgy to help provide petroleum antidotes for Industry's production headaches, Cities Service Research Engineers may have in their files, or at their fingertips, the formula or device that can make short work of your production troubles. Next time—save time. Call your nearest Cities Service office or write to Cities Service Oil Company, Sixty Wall Tower, Room 1732, New York 5, New York.

There is no fee or obligation for this service.

OIL IS AMMUNITION — USE IT WISELY !



Arctic Oil . . .

Frontier settlement in the far north provides motor fuel for our forces in Alaska

OIL from wells just south of the Arctic Circle is now fueling motor trucks, airplanes and diesel engines in the Alaska military zone.

The United States Army, in conjunction with Canadian oil companies, is developing the world's farthest-north oil field at Norman, on the Mackenzie River in Canada's Northwest Territories. In the first five months of 1942, according to the Dominion Bureau of Statistics, the oil wells in the Northwest Territories produced 146 barrels; for the first five months of 1943, production totaled 72,527 barrels.

The first oil well at Norman, a frontier settlement and fur post, was drilled in 1921 by a crew which came in by a World War I airplane, the first to fly to the northland. Incidentally, the propeller on the plane broke, and the men had to whittle out a new one before they could fly back to civilization.

This first well proved that oil was obtainable in the region, but there was no commercial use for it, and so the well was capped until 1930. By then aerial explorations had shown that there were vast deposits of radium-bearing ore, gold and silver in the area. More oil wells were drilled, and a small refinery was brought in.

Ships plying the shallow northern rivers and lakes were built to operate with diesel engines on fuel oil from the Norman wells. In 1940, the operators of the wells, Imperial Oil Ltd., put up a larger refinery and started turning out aviation gasoline. Previously all aviation gasoline had to be brought in by ship and by air.

A highway is now being built through the unexplored wilderness and mountain region from Norman to Whitehorse, Yukon, where the road connects with the Alaska Highway. Alongside the highway a 1,000 mile pipeline is being built over a section of the Rocky Mountains to bring oil from the Norman wells direct to a new refinery being built near



Look, Son . . .

It's going by the window now!

YES, look out of any train window on the Southern Railway System today and you'll see history in the making. A history so new, it may not be in the school books for years to come.

A history so modern, it's over-shadowed now by America's Number One job of winning the war.

But it's there—alive—ready to burst into all its glory when Peace comes to free men once again.

It's an efficient, carefully planned, manufacturing city . . . where a Southern village used to be.

It's a field of golden, sun-drenched grain . . . where scrub pine grew before.

It's a *new* power project . . . a *new* factory . . . a *new* research laboratory. It's a *new* product, a *new* machine, a *new* method.

It's the South, the growing Southland, served by the Southern Railway System . . . and geared to serve all America when our Victory has been won.

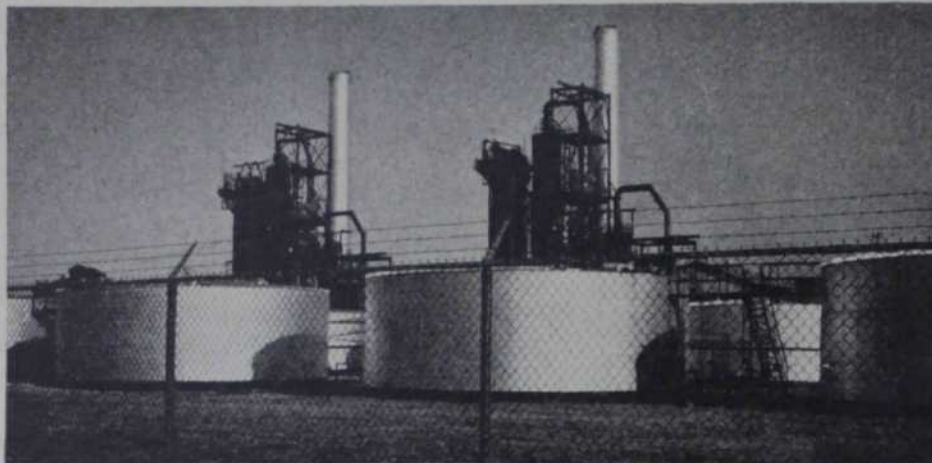
Ernest E. Harris
President

"Look Ahead . . . Look South"

SOUTHERN RAILWAY SYSTEM

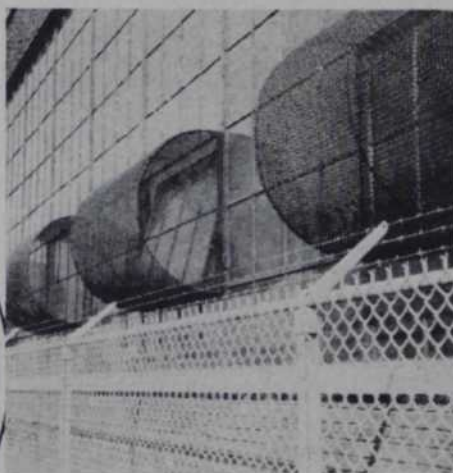
The Southern Serves the South

HOW TO HELP YOUR WATCHMAN DO A THOROUGH JOB



1. FENCE EVERY FOOT OF PROPERTY LINE.

Be sure that your entire plant is enclosed—including the yards and parking lots. U-S-S Cyclone Fence, with its formidable barbed wire top, will guard your plant against spies and saboteurs—day and night.



2. SCREEN ALL WINDOWS WITH STEEL MESH.

Here's the way to be sure that no one can toss tools, dies or plans to a confederate outside. Cyclone Window Guards are helping prevent such losses in many plants.

3. PERMIT ENTRANCE ONLY AT GUARDED GATES.

Then your guards will know just who has come in or gone out—what he carried with him—and when he passed through the gates. The gate is the strategic point in your plant protection. Keep it closed, well guarded.

REMEMBER—a single weak spot is an invitation to trouble. Check your fencing now. Perhaps a few additional feet of fence will tighten your plant protection. A few window guards may remove a hazard to the safety of your plant or the secrecy of your operations. Demands are

heavy and supplies are limited, but if you are doing war work and have the proper priorities, we can provide U-S-S Cyclone Fence and other materials for the protection of your plant. Get in touch with us. We will promptly make a recommendation and give you a free estimate.

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We'll send you our free, 32-page book on fence.
It's full of facts, specifications, illustrations.
Shows 14 types of fence. Before you choose any
fence for your property, get the facts about Cyclone. Mail this
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☐ Residence. Approximately.....feet.



Whitehorse to produce high octane aviation gasoline. From Whitehorse other pipelines are to be built connecting with highways running to Fairbanks.

Getting equipment and supplies into the Norman area was a great freighting project. The 1,500 mile water route leading north from the end of the railway at McMurray, Alberta, proved a great asset, but required a number of portages around stretches of rapids.

Near McMurray another vast oil field is being opened. United States and Canadian government engineers are working on developing commercial methods of tapping the vast oil bearing sands of the Athabasca River area.

This Canol Project (Canol for Canadian oil) is expected to be completed by the end of the year and will save much shipment of oil to the northland for military purposes.

Trouble Scooters

NOT LONG AGO a telephone call came into the Grumman Aircraft personnel office at Bethpage, Long Island. It was from a woman worker. She was home, ill. Worse, she was alone, a water pipe had sprung a leak and water was rising in her cellar.

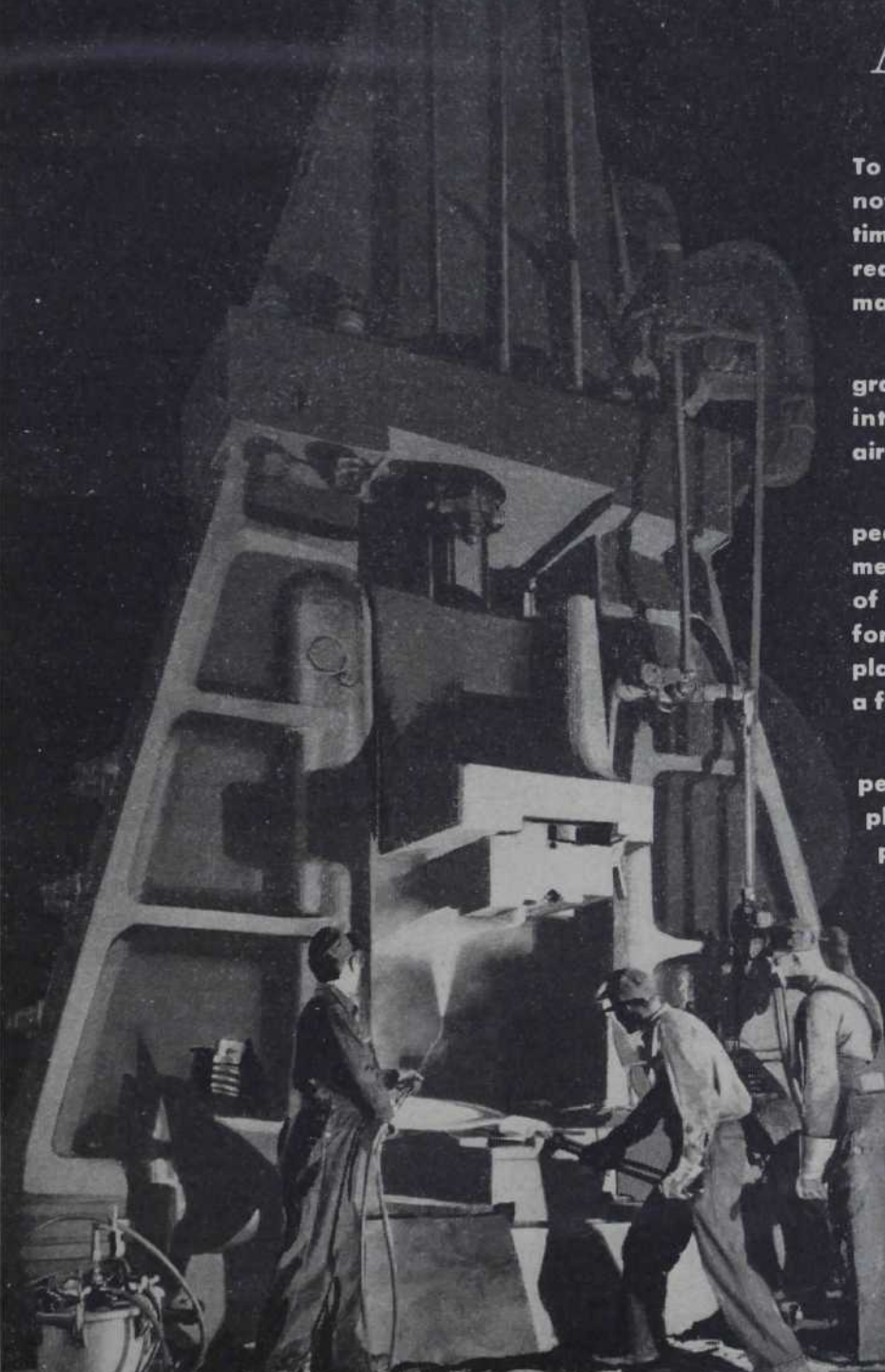
Grumman had the answer. In a few minutes, a little green truck was hurrying out to her house picking up a doctor on the way. Soon the woman was getting preliminary medical treatment before being taken to the hospital. The two men on the truck went to work in the basement. They shut off the water, pumped the cellar dry and repaired the pipe. Two days later when the woman could be brought home from the hospital, everything was shipshape. Before long she was back at work.

That's just one example of what Grumman's trouble scooters are doing. They're industry's latest way of combating absenteeism. Just ordinary small trucks painted green, equipped with all kinds of tools and manned by two expert mechanics, they're on the job day and night, meeting all kinds of emergencies for workers, particularly women workers.

Let a woman riveter suddenly remember, while she's working on the assembly line, that she forgot to disconnect her electric iron at home. She tells her foreman who passes the word along, and a green truck scoots out to "fixit" while the worker stays at her job. Suppose a housewife-worker gets into any kind of difficulty at home or in her car on her way to work. The green truck gets on the job so she can get to hers.

There's no charge for these services. In fact Grumman even takes care of the cost of emergency telephone calls from workers. The way Grumman figures it, neither the company nor Uncle Sam pays for the green trucks. With the trouble scooters boosting production by helping to cut down absenteeism to the point where it's the lowest of any plant visited by the Truman committee, it's the Japs who are footing the bill.

With Only One Exception WORLD'S LARGEST PRODUCER OF ALUMINUM FORGINGS FOR AIRPLANES



To Chevrolet, "conversion" has meant not only a complete swing from peacetime to war production, but also far-reaching changes in this company's manufacturing system.

One important part of this program has been Chevrolet's swift entry into the manufacture of aluminum aircraft forgings.

Totally unknown in this field in peacetime, Chevrolet has, in a period measurable in months, become one of the largest producers of aluminum forgings in the world, with three plants already in operation and with a fourth plant now under construction.

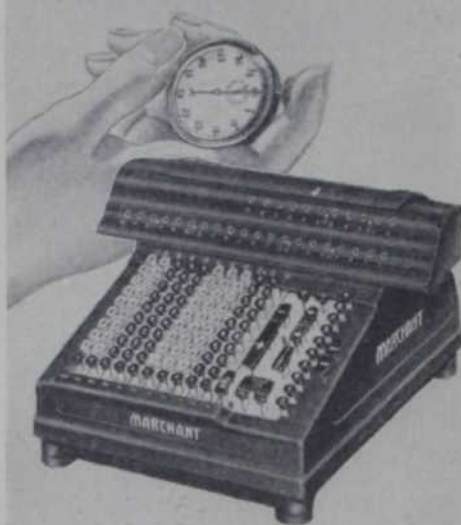
Today, Chevrolet is forging propeller blades for bomber and cargo planes . . . making propeller pistons, propeller hubs, landing gear trunnions, crankcase sections and small parts for the Pratt & Whitney aircraft engines it is volume-producing in its own plants. . . . And Chevrolet is also supplying aluminum forgings for virtually every aircraft producer in America.

Chevrolet hammer men working beside a 35,000-lb. hammer in one of the aluminum forge plants operated by Chevrolet.

★ ★ ★ BUY U. S. WAR BONDS AND STAMPS

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THE TIME-WASTER THAT WAS NOT THERE!



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ELIMINATES THE CUSTOMARY DELAY

*between the entry of the problem and
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The MARCHANT CALCULATOR forms the answer *during*... not after... the time that the multiplier is being entered! The instant you touch the last key the complete answer is before you with proof of factors...all in visible dials! Seconds saved on every problem mean valuable time saved every day.

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SALES AGENCIES AND MANUFACTURER'S
SERVICE STATIONS GIVE SERVICE EVERYWHERE

Grade-Labeling Cries "Wolf!"

(Continued from page 34)

a socialist group which established the London School of Economics. A former faculty member from that school came to America to be Director of Research for the National Resources Planning Board. For the Committee record, Representative Gavin offered this statement of aims and program from the Fabian Society's charter:

It aims at the reorganization of society by the emancipation of land and industrial capital from individual and class ownership and the vesting of them in the community for the general benefit.

"It appears to me," said Representative Gavin, "that this group in control of the OPA have adopted much of the program sponsored by the London School of Economics. I believe honestly they have blue-printed and charted a plan to recast every branch and department of the federal Government and to bring about the complete regimentation of the economic life of the United States. I am convinced they have determined upon a program for the regimentation of agriculture, industry, finance and labor into a socialistic state. They aim to eliminate the middleman, the small business man, the white-collar class. I feel certain that they intend to bypass and eliminate Congress. The professors, I understand, now are outraged and indignant that Congress has the audacity to question their philosophy of 'production for use and not for profit.'" (Hearings, p. 486)

Another offshoot of the London School of Economics was the PEP group, an organization to advance Political and Economic Planning throughout the English-speaking world. The chairman of this group was Israel Moses Sieff. Their platform of 10,000 words was published on March 29, 1933. Among other things it called for, "A national council for agriculture, a national council for industry, a national council for coal mining, a national council for transport, and so on—all statutory bodies with considerable powers of self-government, including powers of compulsion within the province with which they are concerned."

In 1941 Mr. Sieff, author of the British PEP plan, joined OPA as a special consultant. Later he also was designated to be an official adviser to the Office of War Information.

Fixed grades for hosiery

PROF. J. Kenneth Galbraith, Deputy Administrator of OPA in charge of the Price Section, was described before the Committee as author of a book, published in 1937, which argued for the elimination of all private brands and grades in certain textiles. The witness then traced how closely the principles outlined in Professor Galbraith's book were developed in the OPA order

establishing fixed grades and types for women's hosiery. These regulations worked toward the practical elimination of national brands in feminine hose.

"It is clear that Galbraith determined here was a chance to destroy the price jurisdiction of the manufacturer," the witness concluded. "When Rayon Hosiery Regulation MPR 339 was issued, it became obvious that retailers could conform only if they were willing to have the American distributive system socialized and changed beyond recognition. At that point it became necessary to oppose actively the spread of these principles through mandatory federal regulations."

Soon after this testimony was heard (and after the resignation of Leon Henderson as OPA chief), Deputy Galbraith resigned to resume his academic career.

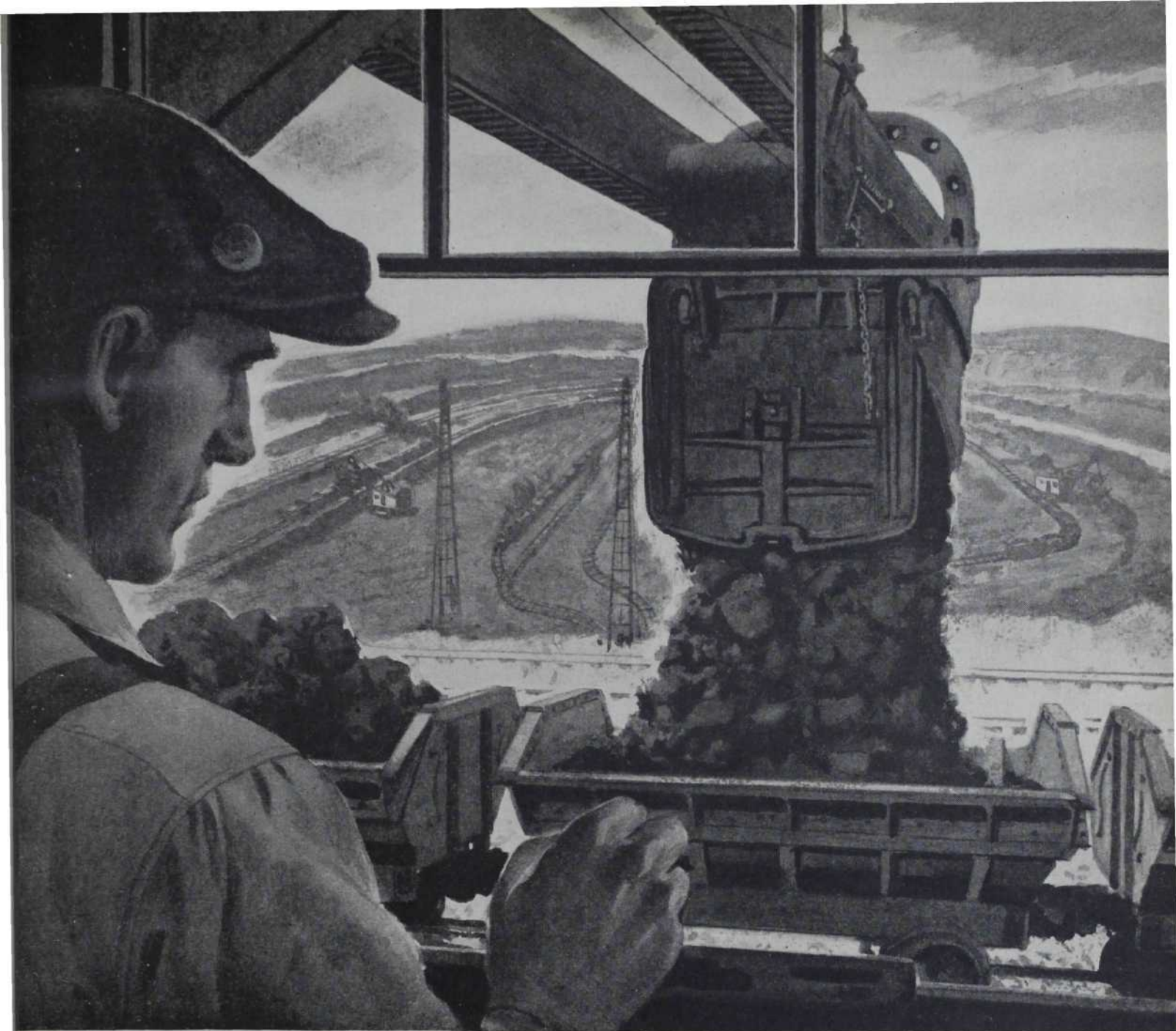
Alfred Eames, President of the California Packing Corporation, told the Committee that OPA ceiling prices for 1943 on all canned fruits and vegetables were fixed by statistical averages, which largely ignored grade and quality differentials. He saw this beginning in uniform prices and grades as preparatory spade work looking ultimately to national grade-labeling.

Would destroy good will

"THE IMPOSITION of grade-labeling on trade-marked products will destroy the value of the trade-mark and the good will which is inseparable therefrom. The result, if not the purpose, of grade-labeling will be to destroy the individuality of the products of every manufacturer. The inevitable result of such a program, if successful, will be to destroy the incentive for the development of new and improved types of goods. I know of no single action that our Government could take which would be more destructive to our American way of life and our American industrial system than a movement designed to, and which would, effectively kill the trade-marks of this country."

As recompense for the damage it would do to the American way of life, grade-labeling appears to offer only confusion and expense.

Perhaps its most fatal defect is the fact that most foods simply are not susceptible to precise mathematical grading. In tomatoes, for example, there are easily recognized quality differences. But different qualities are preferred for different uses. One canning process may handle a large firm tomato to best advantage, but another process calls for the small, juicy type. Yet each is Grade A for that particular process. Dehydrated tomatoes are processed most efficiently from a type of product entirely unsuitable for canning or catsup. Shall we have several grades for every type of tomato? The same problems arise for every fruit and vegetable. Unless each is graded according to two



How many million tons before victory?

HOW much copper and iron ore? How much limestone and coal? . . . Frankly, we can't tell you. But we can tell you that these big electric shovels will keep relentlessly at their jobs of digging strategic materials no matter how many million tons it takes.

Because *steady uninterrupted* production is always the important thing in open pit mining — in war or in peace—that's the goal upon which P&H engineers have focused their attention for years.

For example, as far back as 1935, P&H brought a great improvement to the conventional electrical shovel control system — a new exciter unit which smooths out power surges, eliminates all need for contactor replacements, reduces electrical breakdowns and lost production time to a new minimum.

P&H's sixty years of experience in applying electrical power to the handling of heavy loads has pro-

duced many outstanding developments like this. And the mining of vital materials by P&H Electric Shovels is but one of many ways P&H products are serving America in the march to Victory.



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Electric Cranes • Electric Hoists • Arc Welders
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Ample benefits for moderate means

If you feel your current income will not permit the life insurance you need, see our plan with premiums eased for the first five years.

Ask for our
pamphlet



The Prudential
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Home Office, NEWARK, N. J.

or three different standards, related to ultimate use, the grades lose all practical significance, and price differentials would not necessarily have any relation whatever to quality.

Second, the theorists incline to arbitrary classification, as Grade A, B, or C. But there is always some range within each grade. This means that every processor must seek constantly to work down to the lowest standard permitted by the Government for each grade, since he can earn no premium for any item above the grade standard, unless he goes on to a higher grade at a higher price.

More bureaucracy

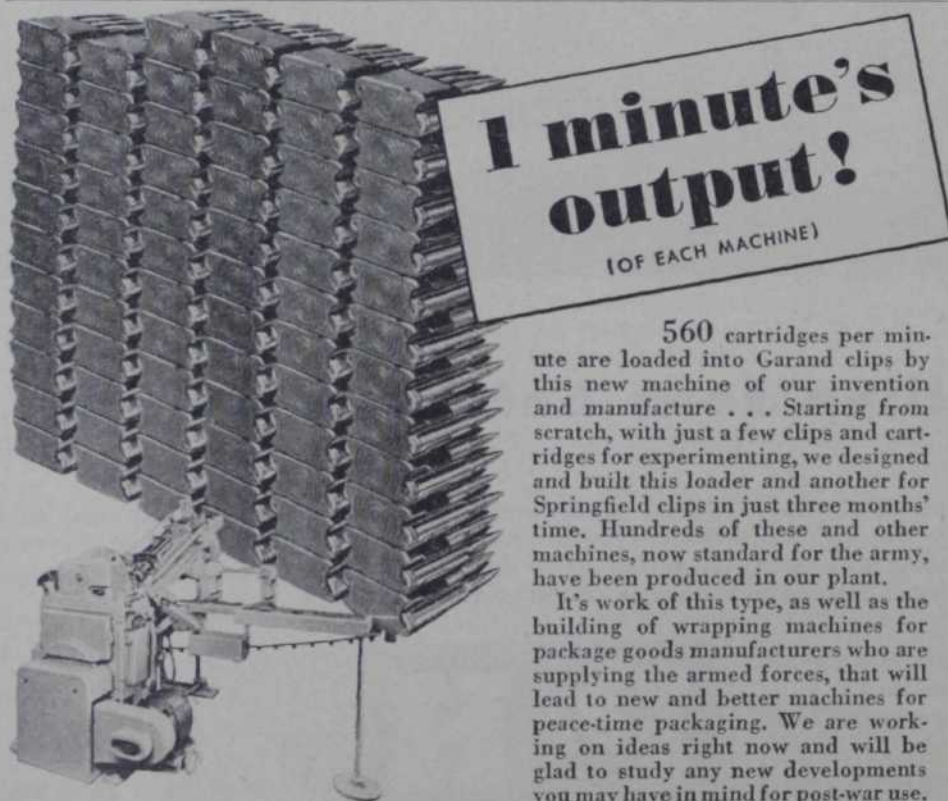
MOREOVER, the maintenance of grades and standards is a variable function, subject to all the normal lapses of bureaucratic administration. An incompetent or corrupt inspector might remove all the protections assumed by the consumer to rest in the federal standard. Any such lapse on a privately branded product rebounds at once upon the good name of the producer. But government grades eliminate this automatic corrective tendency, and place full responsibility for standards on the symbols of the federal label.

Furthermore, as Congress discovered, OPA's grade-labeling campaign has been riding roughshod over the laws on national standards as administered through the Bureau of Standards, and the Food and Drug Administration. Conflicting and overlapping regulations from OPA and Food and Drug Administration had become a commonplace for the food processor.

Through an amendment to the bill extending the life of the Commodity Credit Corporation, Congress at length enacted a strong curb on grade-labeling. This amendment specifically forbids the Price Administrator to require grade-labeling of any commodity. Standardized products may be specified by federal order only to the extent that such regulations may prove necessary to enforce established price ceilings. This compromise provision still leaves many practical questions undecided, but the public approval of the Committee's investigation of OPA has served to slow down, at least temporarily, the crusade for nation-wide grade-labeling.

The tactics of the grade-labelers will bear watching. Though the present Congress has made it plain that it wants none of this type of reform pushed down its throat in the name of winning the war, it will need to keep up its guard. Said a Congressman's secretary as this article was being prepared: "Why, grade-labeling is dead. Congress killed it just the other day." To which the Congressman growled: "We killed the subject, but its promoters are still alive."

Manufacturers, wholesalers, retailers will find it worth while to work together on the subject, not only for their selfish interests but for the sake of their customers who stand to lose equally from this benign meddling.



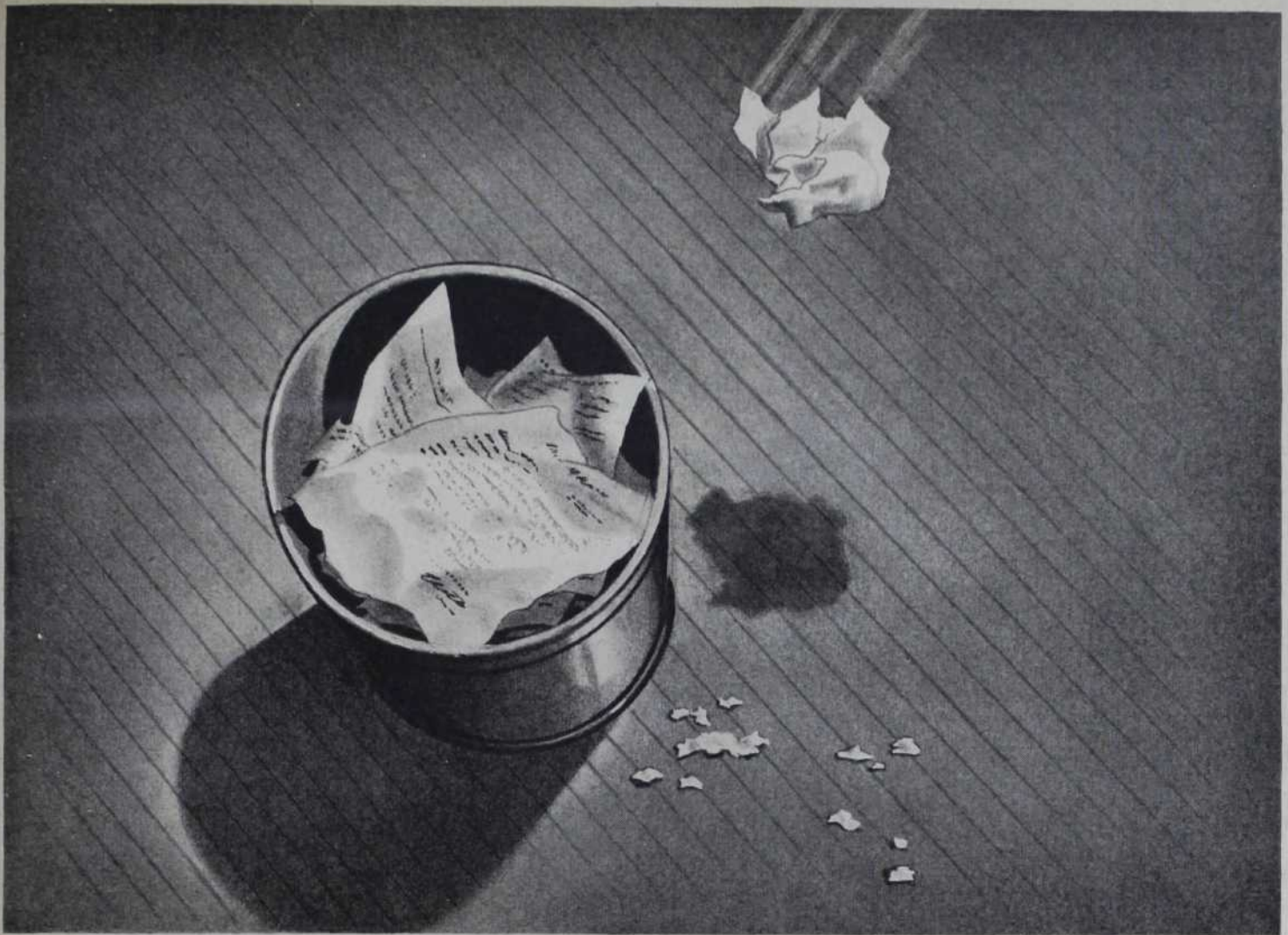
560 cartridges per minute are loaded into Garand clips by this new machine of our invention and manufacture . . . Starting from scratch, with just a few clips and cartridges for experimenting, we designed and built this loader and another for Springfield clips in just three months' time. Hundreds of these and other machines, now standard for the army, have been produced in our plant.

It's work of this type, as well as the building of wrapping machines for package goods manufacturers who are supplying the armed forces, that will lead to new and better machines for peace-time packaging. We are working on ideas right now and will be glad to study any new developments you may have in mind for post-war use.

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HOW YOUR WASTE PAPER CAN HELP WIN THE WAR

Wood pulp is so vitally important to war that—according to competent authority—if all pulp production were to stop today, our entire war effort might collapse within six months!

The "paper work" of war alone eats up tons of stock—30,000 pounds for a battle-ship's plans, 2,000,000 pounds for the first draft registration, 4,000,000 pounds for War Bonds sold up to May 1.

Virgin wood pulp, released for use by reclaiming waste paper, makes special rayons for parachutes and combat tires. It is used in plane windshields, explosives, hand grenades, gasoline containers, stretchers, expendable raincoats, insulation, packing material, ammunition boxes . . . a gigantic quantity of matériel.

Thousands of tons of critical materials—

steel, aluminum, synthetic rubber, phenolic resins—are saved by substituting wood fiber products.

There is no shortage of standing pulp wood. There *is* a shortage of manpower and transportation to handle it, a shortage so acute that some curtailment of production already has been required.

That's where *your* waste paper basket enters the scene. Every scrap of waste paper is needed to help conserve wood pulp stocks. American businesses and individuals are urgently asked to save all the waste paper they can and to dispose of it to regular dealers who will see that it reaches reprocessing plants. It will be made into new paper, freeing virgin pulp wood for the biggest job today—keeping our war machine rolling toward Berlin and Tokio!

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Men Are More Than Systems

By L. WARD BANNISTER

ALL OF us, whether employer or employee, want to know what kind of system we are going to live under after the war. In the answer lies the future of every one of us.

Are we going to retain private initiative and enterprise as the principal factors in our economic system? Or are we going totalitarian in some form?

The time for decision is short. More than a hundred public and private agencies are engrossed in blueprinting the future and many of the blueprints are in conflict.

It is time for the rest of us to have plans of our own. It is not for us to let things happen, but rather to help make them happen the way we want them to happen.

What are the choices before us? Several competing ideologies vie for our support. Each has its advocates here in America. Some of these advocates, because of official position, have a better chance to plead and advance their cause than do the others.

We have the Socialists, who believe in government ownership and operation of our basic natural resources, with the Government distributing the resulting product among the people.

We have the Communists, who elaborate on the same idea and, in doing so, would achieve their goal by physical revolution.

We have the Nazi and Fascist ideologies, in which the paper title to industrial and agricultural property is, in the main, left in private ownership but the major control and direction of that property and of the people who get their living from it are mainly in the Government.

All of these are "planned economies." The "planned economies" of some of our own "advanced thinkers" are simply variations of one or more of these themes. It is fundamental

with "planned economies" that a hierarchy of government officials shall decide what shall be produced, where and when; what materials shall be used, what factories built or expanded, what lands cultivated, what crops raised, what markets sought, and all of this probably at what prices, wages and salaries.

Opposed to these various ideologies stand, like a bulwark, the private enterprisers who represent a system more fully developed in the United States than anywhere in the world. Under private enterprise, the great bulk of property is privately owned and, in the main, privately operated and directed.

The superiority of the private enterprise system over the others is

easily demonstrated. A given function is democratic in proportion to the number of individuals engaged in it. Surely the private enterprise system is the most democratic in point of units of control.

Experts decide

I ONCE asked Earl Browder, leading Communist in America, how Communist Russia determined what items should be produced, what quantities should be produced, the designs of commodities, and so on. He replied that this was determined by a group of government experts. I then asked him what part the legislative branch of the Russian government played. He answered that, although in theory the legislative branch would be the ultimate authority, its part was slight in practice, because the legislators were not production experts.

I did not argue, because he was my guest, but I could not help inwardly comparing Russia's small group of experts with the more than 3,000,000 units of production

control, not counting the more than 6,000,000 farm units and all the professional offices, under our private enterprise system.

Under Nazi-ism, Fascism and the various planned economies of our own "advanced thinkers," government's role is not so great as under Socialism or Communism. However, a few directing experts would still exercise the ultimate control, instead of leaving it where it is now—in the hands of millions of private units. There is no democracy in production controls under totalitarianism. It is, of course, self-evident that there is also far more democracy in consumer controls under private enterprise than under other systems. Millions of men and women customers at the counters of



CHARLES DUNN

Democracy delivers, and in greater measure, the blessings other ideologies promise



Maps in minutes...by Multilith

YOU can't expect even the Marines to know where every enemy gun, pillbox and tank trap is when they first land on a hostile shore. So they take a Multilith* machine with them.

Right on the beach—as moment-by-moment reports come from scouts—enemy positions are instantly drawn on a paperlike Multilith master, slipped onto the machine, and correct maps run off for quick distribution, to save lives of fighting men.

This is the same machine and the same paperlike master (called

Duplimat*) that thousands of businesses are using to speed production schedules, save vital man hours and assure accuracy.

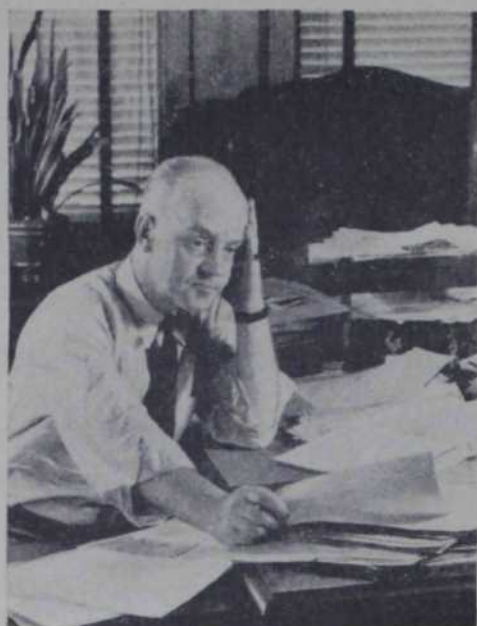
You probably have in your office and factory a Multilith (or Multigraph* or Addressograph* which save in other equally important ways). Let us help you make sure you are getting all the uses and values these modern machines have for you. There is no obligation except the obligation we all have to produce everything we can as fast as we can for victory. Write Addressograph-Multigraph Corporation—Cleveland and all principal cities of the world.

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SIMPLIFIED BUSINESS METHODS



The FORGOTTEN MAN of '43

HE'S the Executive . . . poor guy!

The hurrahs and the headlines go to our fighters and war-workers. That's okay with all of us. But folks sort of forget that the Executive is very much a part of this war, too! Without him, war production would bog down mightily. He's the Planner... the Organizer... the Coordinator.

He's in a tough spot, is Mr. Big. *He* has to keep bailing when tough deadlines and material shortages threaten to swamp the production boat. *He's* the fall guy when things go haywire. And manpower shortage is something for *him* to worry about... which he does. Boy! Does *he* need a helping hand!

Yes... *we've got that helping hand!* It's yours for the asking, Mr. Executive . . . and this is it:

First . . . pick out your worst bottleneck. Whatever it is . . . Inventory, Personnel, Procurement or one of the others . . . call in a Remington Rand Systems and Methods Technician to analyze your office or plant records and routines.

No . . . this Remington Rand Technician is no miracle-man. But he *is* trained to recognize, analyze and prescribe the right medicine to cure the many wartime ailments of Business and Industry. In many cases he has increased office production by as much as 50%. It'll be well worth your while to put in a call for him today at our nearest Branch Office.

KARDEX Production Controls • Procurement Controls • Personnel Controls
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stores and in the offices of factories determine, under private enterprise, what they want to buy. By that determination they compel the producing units to comply. Under the other systems, a small group of men decides not only what should be produced, but also what the consumer can buy.

Advocates of totalitarian systems frequently charge private enterprise with unnecessary duplication of facilities offered to the public—two filling stations at the same street intersection, where one might do the work. Where such wastes occur, they represent wastes in the overexpression of human energy. But I wonder if these totalitarians ever think of the wastes of under-expression—those wastes of repression imposed by governmental regulations; prohibitions and controls that limit new ventures, new inventions, the lines of production, the procurement of raw materials, the marketing of the finished product. These wastes are worse than the others.

Socialism and Communism outlaw the profit principle. Nazi-ism and Fascism control it to the danger point, and "planned economies" follow close behind. Yet it is the profit principle that, under our system, polices the entire assembly line of production and distribution from raw material to finished product. It is chiefly responsible for the adoption of new devices and methods, and for the elimination of waste. The profit need not be exorbitant, but it must be enough to induce private capital to come out and function. The profit principle is as vital a factor as the wage principle in the superiority of the private enterprise system. It should be recognized by all and, within reasonable limits, safeguarded by government itself.

In quantity production of goods for popular distribution, America is conceded to rank first in all the world. It has the highest standard of living. Millions of production control units, in the hands of free men, are producing and will produce far more goods than can be had from any small group of government planners. It is not by accident that America is the "arsenal of democracy," the pantry of the world.

Talk of "wage-slavery"

THE Socialists and Communists like to tell us of the "wage slavery" of the private enterprise system. Yet, under their systems, the "wage slavery" is infinitely greater. The worker is told where to work and at what, for what wage, and for how long. Under our system there is far more opportunity to choose occupation, place of work, employer, and an infinitely greater opportunity to rise.

Frequently the totalitarians charge the private enterprise system with "class distinctions." But what of their own system? The highest officers do not ride in "jalopies" and do not sit in the poorest seats at the opera. Factory workers and their wives bow to their superiors and the wives of their superiors. They have to. Horatio Algers we have without number who have risen from the lowest ranks to the highest

and have not had to depend on the permit of some officer of the state to do it. Class distinction is worse under totalitarian systems than under our own.

The civil liberties—those freedoms of speech, press, religion, and assembly—are safe only under the private enterprise system. Where, under any other, would the citizen get access to the printing press, the forum or the radio? So, with education. We like to think of our universities as the very cathedrals of Truth, and of their professors as its priests. Truth must never become the slave of power. It can live only under those diversities of public and private sponsorship which permit it to choose its own abode and remain forever free.

Develop the individual

WHAT system will do most to develop the human personality—that sum total of parts or attributes which embraces, in addition to the physical, those of imagination and resourcefulness; those of judgment whereby to appraise possible lines of social and personal advancement, together with the will, industry, courage and daring to give the chosen lines effect? Men are more than systems. The development from generation to generation of the increasingly effective human being—that ought to be the social goal. If a given economic system does not best serve that goal, it should be discarded.

We know that there can be no muscular development except through the exercise of the muscles. Similarly, we know, if only we stop to think about it, that there can be no development of the other attributes of personality unless they, too, be put to use. The development of the human personality is far more certain under our private enterprise system than under the others.

These other systems are feather-bed and spoon-fed philosophies. They are philosophies under which a few lead and get the benefit of personal development while the great mass of the people are led and left undeveloped because they can't exercise their own judgments, inventiveness and courage. We all need the star of ambition ahead and the lash of circumstance behind. They are good for us all. They make us move, hustle and achieve.

There is a jealousy on the part of some of the minority against some of the majority. It reminds us of Dean Swift's story of the visit of Gulliver to the island of Lilliput. That giant, you'll recall, after his arrival, lay down to sleep. While he slept the little Lilliputians swarmed over his body. When he awoke he found they had tied him down with ropes and stakes.

No one of them, alone, could have done it. They had to resort to mass combination. In a perfectly justifiable attempt to raise the common social level today let's remember that, after all, abilities are not equal. Let us beware that we do not shackle too much the genius which, if left more free, would serve us all.

This is not to say that the private

Have a "Coke"=Welcome, Friends



...or how to get along in Alaska

The American soldier in Alaska meets up with a hundred little things that remind him of home. One of them is Coca-Cola. *Have a "Coke"*, says he, and it clicks in the Yukon as it does in Youngstown or Yuma. From pole to pole Coca-Cola stands for *the pause that refreshes*—has become the high-sign between kindly-minded strangers.

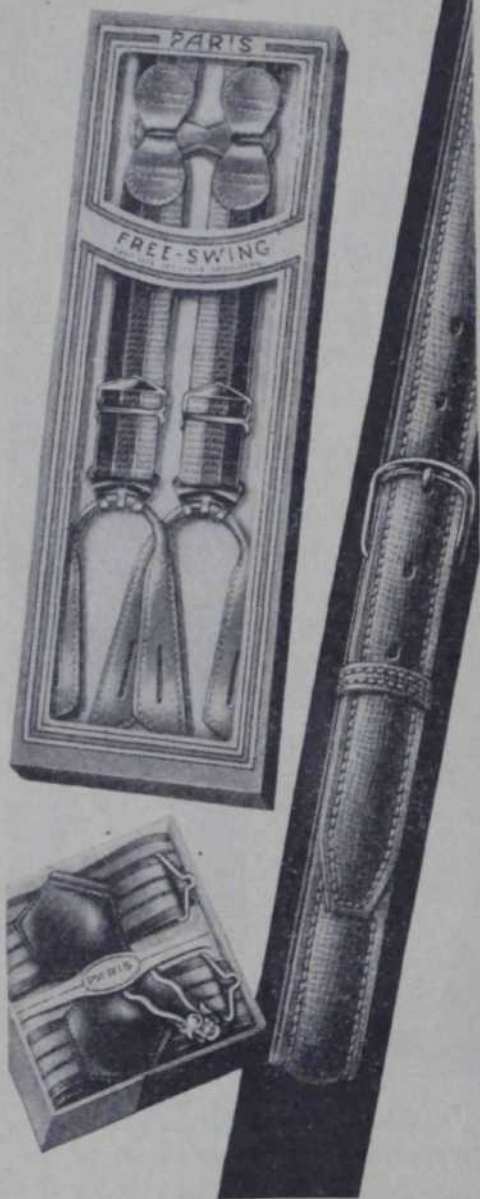
"Coke"=Coca-Cola

It's natural for popular names to acquire friendly abbreviations. That's why you hear Coca-Cola called "Coke".



—the global high-sign

THANK YOU FELLOW AMERICANS!



Thank you for your patriotic patience and cheerful cooperation. To speed Victory, we shared our output with Uncle Sam. Naturally, shortages resulted for you. Your willingness to buy only what you needed made things easier. To make the going smoother for you, PARIS keeps quality up to give you long service, and keeps prices down to help you buy more War Bonds. In wartime . . . as in peacetime . . . PARIS serves you right! ☆☆ A. Stein & Company Chicago ☆ New York ☆ Los Angeles.

PARIS

GARTERS • SUSPENDERS • BELTS

The Support of a Nation

enterprise system is perfect. Far from it. Corrections are needed in a number of respects, such as in the relationship between employers and employees, and between the executive and legislative branches of government.

Many employers should more completely recognize that the days of *laissez-faire*, of Adam Smith, John Stuart Mill and Herbert Spencer are over, for the simple reason that conditions have changed. Some degree of government intervention is necessary to protect the employees, the employers and the public. Safe working conditions, fair wages, and the recognition of unions properly regulated and run, are among the concessions that management should accord to labor.

Labor, too, should recognize that its own *laissez-faire* days are over. Unions have grown up. They need the bottle no longer. Monopolies are monopolies, whether of private capital or of labor and, when unregulated, are a deadly menace to the social welfare. Labor should acknowledge more often and definitely the right of private capital to a fair return upon its investment, a return sufficient to induce capital to function and commensurate with the risks run. What would satisfy Phillip Murray and William Green as investors, probably would satisfy private capital. Fair profits and fair wages to go together. The two combined make for the "abundant life" for all.

There are some in government who covertly seek to destroy private enterprise and its Siamese twin, legislative democracy, and advocate instead an executive democracy, from which it is but a step to dictatorship.

Among the devices which these men employ are:

Taxation schemes designed to prevent accumulation of private capital for production.

Stealthy increases in powers of the Executive.

Extreme social welfare schemes without regard to the ability of the underlying economic base (surplus production over inducing wages to labor and inducing returns to private capital) to support them.

Advocacy of the "safe and easy" life rather than that of inventiveness, industry and daring.

During the past few years there has been a great increase in the prestige of the Executive, at the expense of Congress. If Congress would restore its lost standing, then let it:

1. Equip its committees with its own research staffs of economists, engineers and lawyers, so Congress will not be compelled to run so often to the Executive agencies for information.
2. Curtail the giving of "blank checks" to the Executive.
3. Create fewer agencies responsible to the Executive.
4. Transfer a number of existing agencies, including social welfare bureaus, from control of the Executive and lodge it with Congress.
5. Develop some real courage in asserting the will of Congress in the discharge of its function as the maker of laws and policies.

Some such program would, among other things, diminish the political power of millions of employees and financial dependents of the Executive office at the polls, ending Executive domination of Congress through control of elections.

The private enterprise system demands a representative democracy. A representative democracy demands the private enterprise system. They both belong to free men, and free men are bound to have them.

Let us bid "good night" to totalitarianism in America.

What It Takes to Be a Policy-maker

(Continued from page 36)
for this (the food) industry."

That latter statement, coupled with one from pages 74 and 75 ("The number of grocery stores in the United States has increased out of all proportion to the increase in population . . . signifies an uneconomic use of labor and capital resources") can be read to mean that one or two chain groups might take over the food industry to advantage, be declared a public utility or perhaps be operated by the Government.

"That," he agrees, "would be the most economical method."

These views he carried with him to OPA and, since it seems unreasonable to assume that OPA willingly added internal strife to its external bludgeonings, his fellow-workers apparently shared his ideas.

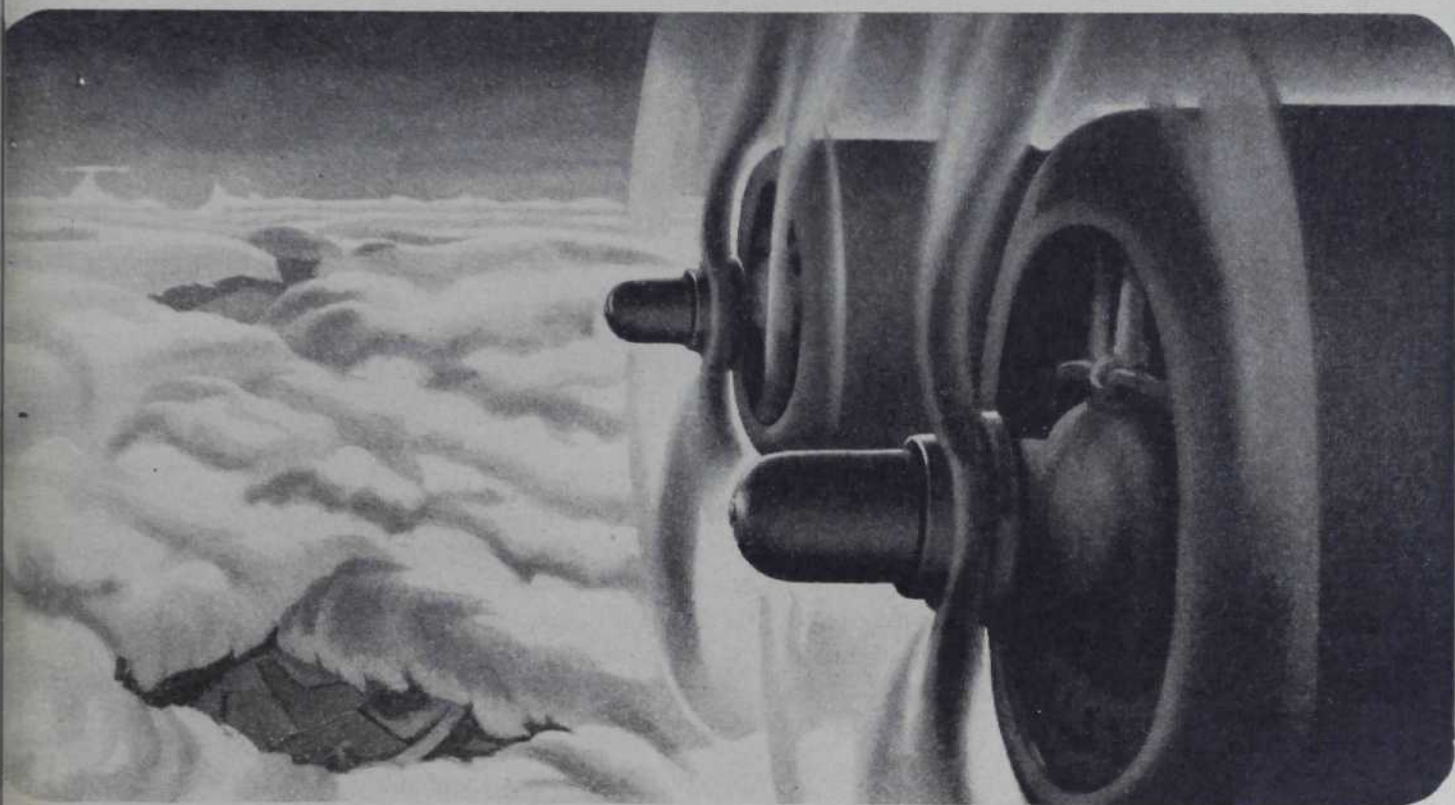
Mr. Hoffman insists, however, that he did not use his position as an OPA policymaker to put his own ideas in operation.

It is a coincidence, then, that the General Maximum Price Regulation issued in May, 1942—when the wholesale prices on many commodities were higher than the ceilings imposed on retailers—would have forced thousands of grocers to close shop, thus decreasing the number of stores as he suggests elsewhere.

"I wasn't in favor of keeping an inflexible ceiling on merchants as long as other factors in their business costs were flexible," he says.

In the 1940 Yearbook of Agriculture, he had a good bit to say about those other costs. Of four which he mentions, he finds wage rates "by far the most important in explaining changes in marketing spreads. The reason is simply that most of the charges for getting food products from the farm to the consumer are made up, either directly or indirectly, of wages. . . . It is evident that earnings do not represent a very large part of the margin between the

FOR THEY ARE THE SALT OF THE SKY



WITH DEEP-THROATED ROAR, the engines drone steadily. They must not fail. The life of every young American, who wears the coveted wings on his tunic, hangs in the balance of their performance.

Building matchless motors for our air force is the grateful task of America's designers and industrialists. More power... more speed... more endurance are the ceaseless needs. No more difficult task ever faced a home-front. Packing terrific horsepower into the size-limits of an aircraft engine presents a host of problems. Among these is the disastrous effects of heat on motor valves.

And how did engineers tame this demon heat? Substance after substance was tried. Finally they found the answer—the vital cooling agent—in one of industry's most familiar minerals... *salt!*

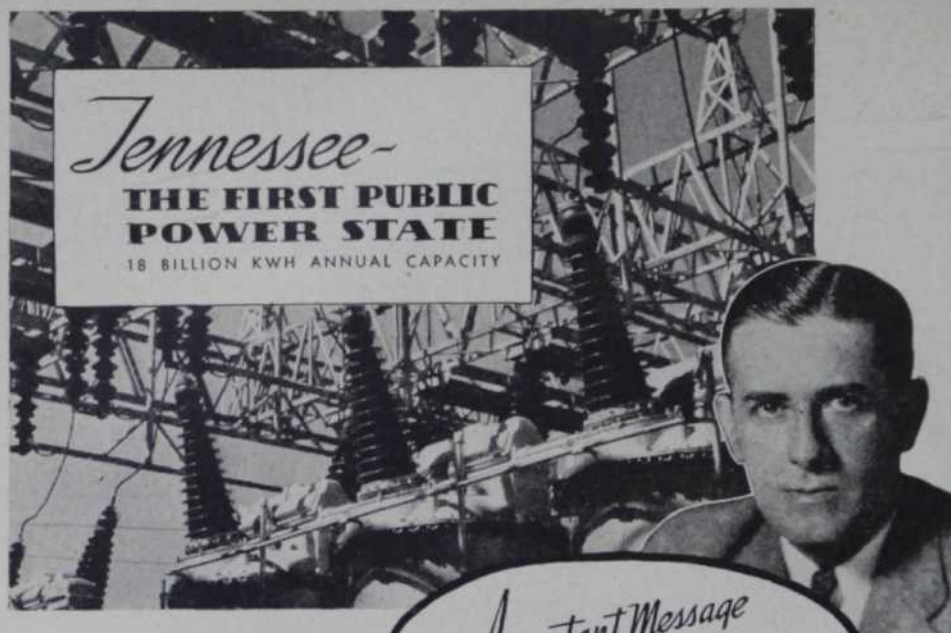
For salt, if you will recall your chemistry, is sodium chloride. And the derivative, sodium, is the essential ingredient in the *sodium-cooled* valve so widely used today. Without it, valve heads would melt helplessly.

Here is another vein in the elaborate network of salt's contributions to America's production. There is hardly an industry that does not use salt. Many of the leaders rely on International's Sterling Salt. *Why?* Either because of the superiority of its basic grades or because of the unique salt processes developed exclusively by International. They can save you man-hours and money, too. And they can also improve your production.

International Salt Co., Inc., Scranton, Pa., and New York, N. Y. Sterling Salt for every use—in industry, agriculture, the home.

Tennessee- THE FIRST PUBLIC POWER STATE

18 BILLION KWH ANNUAL CAPACITY



*An Important Message
to Manufacturers*

from PRENTICE COOPER
GOVERNOR OF TENNESSEE

Basic Advantages To Plant Locations In Tennessee

- ★ An unsurpassed variety of major industrial minerals and agricultural products and materials.
- ★ Huge coal reserves make possible economical steam-power generation.
- ★ An inexhaustible supply of industrially suitable water.
- ★ Inland waterway system of three great rivers for low-cost transportation to Midwest, Gulf, and World ports.
- ★ Central location permitting 24-hour delivery to more than 51% of the Nation's population.
- ★ Excellent railway, highway and airline transportation.
- ★ Cooperative native-born skilled and semi-skilled labor.
- ★ Opportunity for low-cost assembly of raw materials or manufactured parts.
- ★ Uncongested plant sites near basic materials, river and rail terminals.
- ★ Ideal living conditions for both employer and employee.
- ★ Sound State tax structure. No personal earnings or sales taxes.
- ★ State and municipal governments friendly to industry.

Eighteen billion kilowatt-hours is the annual capacity of electric power that will be available to manufacturers in the Tennessee Valley after the war.

The giant hydro-electric system of TVA located on the Tennessee River and tributary streams and steam plants at strategic points, with transmission lines reaching every section of the State, gives to manufacturers in the area an abundance of power and the advantage of the lowest rate in eastern America.

Low-cost power is only one of many advantages to plant locations in Tennessee. Check the other basic advantages listed.

Manufacturers interested in meeting changing conditions and post-war competition should investigate Tennessee now.

Write for specific information and surveys relating to your particular requirements. Ask for illustrated booklet: "Tennessee—Land of Industrial Advantages."

Governor's Industrial Council, Department of Conservation
609 State Office Bldg. Nashville, (3) Tenn.

Investigate TENNESSEE

farmer and the consumer. . . Obviously the total marketing spread would not be greatly reduced even by the total elimination of all earnings to capital invested in food enterprises."

Mr. Hoffman apparently did not allow this view to color his OPA policy-making, either. Although much talk was heard about excessive profits as a cause for rising food costs, no one, it seems, mentioned the part rising wages might be playing.

"Obviously we couldn't roll back wage scales," Mr. Hoffman says in referring to the incident.

Thinking about things

AT PRESENT his working days are given largely to conferences and thinking about many things:

His past with OPA: "There were too many introverts over there."

The Government debt: "We can never pay it off unless the economy is controlled even more than it is today."

His own future: "I'd like to stay with the Government or get a good job in the food industry."

And, naturally, about policy-making.

While thinking, he smokes cigarettes incessantly and takes no offense at the observation that he chooses an advertised brand.

Outside working hours, he takes a sociable drink, plays persistent but undistinguished poker, and moves from agricultural theory to practice in an eight-by-ten Victory garden where tomatoes flourish.

To this he may one day add a writing assignment dedicated to better understanding between business men and government people.

"Business men generally have the wrong idea about people in government—and vice versa."

Mr. Hoffman is nicely qualified for such authorship. People in government regard him as "a right guy." Most of the many business men who know him, like him.

"We can get along with him," they say.

It is difficult not to, although one loyal British subject once broke off amicable relations with him in a way that shook the Hoffman faith in government omniscience.

They were carrying on a correspondence game of chess—next to poker the favorite Hoffman pastime—in the days when the Duke of Windsor's courtship of Mrs. Simpson was front-page news in this country.

British papers were not permitted to mention it.

One day Mr. Hoffman enclosed a clipping about the royal romance with his chess moves.

His British opponent wrote back: "How can your American papers print such rot—and how can an intelligent American believe it enough to send it to me?"

The chess game broke up.

"That's another reason I'm against censorship," Mr. Hoffman says today.

—LARSTON D. FARRAR

Canvas Protects The "FLYING TIGERS"



SOMEWHERE IN CHINA: P-40 planes of American Fighters flying with the Chinese Army are protected during overhaul by canvas. Yes, every yard of Hooperwood FIRE CHIEF-finished Canvas is just as important to the war effort as steel, aluminum, explosives and other vital materials.

And when the war is over, this amazing fire, water, weather and mildew resistant Hooperwood "Engineered Canvas" — now produced exclusively for government needs — will open up new broad fields of usefulness, benefit many widely used products.

To mention but a few — awnings that won't ignite from carelessly-tossed cigarettes or rot from mildew; special canvas truck covers that will outlast their predecessors several times

over; welding curtains, construction windbreaks and tarpaulins that refuse to burn even though touched by torches, hot rivets, or glowing coals; canvas marine supplies that will help strike out the fear of fire on shipboard; aircraft canvas fabrics that repel gasoline and oil.

These and many other applications of Hooperwood "Engineered Fabrics" for business and industry will be waiting for you when conditions return to normal.

WM. E. HOOPER & SONS CO.

New York **PHILADELPHIA** Chicago
Mills: **WOODBERRY, BALTIMORE, MD.**

Since 1800 (through six wars) the HOOPER name has symbolized highest quality in Cotton Duck and other Heavy Cotton Fabrics, Paper Mill Dryer Felts, Filter Cloth, Rope, Sash Cord.

Fire-Chief Finished

(PATENTED)

HOOPERWOOD COTTON DUCK

Burnt Offerings to the Axis

By J. HOWARD RUTLEDGE

WAR PRODUCTION has been halted in hundreds of plants, not by sabotage but by fires which in most cases could have been prevented



We let down our guard against fire in wartime and the toll goes up. Losses for '43 threaten to reach \$400,000,000

FIRES in the United States last year cost the lives of nearly 10,000 persons. The number will be about the same this year. That's 2,000 more than were killed in action in our armed forces in the first 12 months of the war, including Pearl Harbor.

This is mentioned here, not to indicate that war, after all, is not costly (which everyone knows it is) but to show how terrifically costly are our daily fires which we allow to happen, and which we sometimes seem to take for granted.

In the first two years of the war, bombing of England, including the destructive attacks on London, Coventry and other cities, caused property damage estimated at \$408,000,000. In the same period, fires in America caused damage of more than \$600,000,000.

Not counting inconvenience, loss of time or loss of irreplaceable records, fires each year cost us enough in dollars to pay for two airplane carriers, three heavy cruisers, ten destroyers, a submarine, 90 bombers and 100 fighter planes.

In wartime, fires are more frequent than in peacetime. For one thing, all-out war production creates new fire hazards. Then, in our effort to turn out needed supplies at topnotch speed, we take unnecessary chances. We become less vigilant about fire than we might otherwise be.

We let down our guard and burn up our goods.

That's what happened during World War I when fire losses hit an unprece-

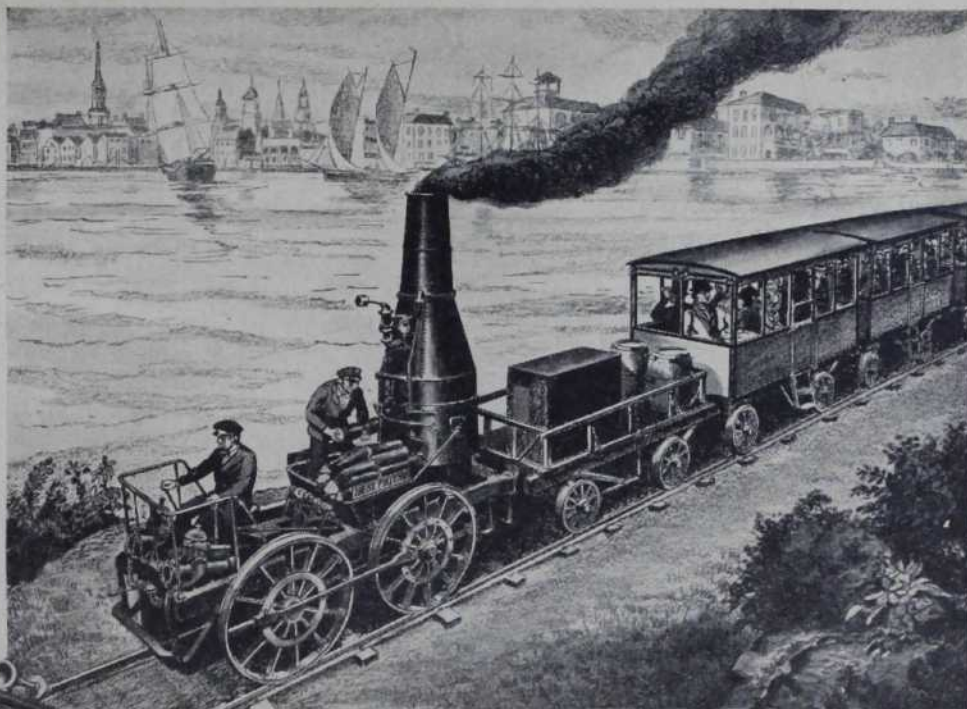


In four months this year there were as many fires as in all of last year

dented high. It is happening again now.

Our monthly fire losses took a terrific jump in December, 1942. It was one of the highest months in ten years. In March, 1943, there was another big jump. In June, our fire losses, according to the National Board of Fire Underwriters, went up to \$26,854,000—20 per cent more than for the same month a year ago. These

THERE'S SOMETHING NEW IN THE PICTURE



SOUTH CAROLINA RAILROAD 1830

The "Best Friend of Charleston" was the first locomotive entirely built in this country—for the South Carolina Railroad, now part of the Southern Railway System.



Daily movement of a staggering quantity of oil from New Orleans to the Eastern States is the No. 1 war job of the Southern Railway. The Southern assigns its fleet of General Motors Diesel freight locomotives as the key motive power to expedite this important flow.



There will be something new in the farm and industrial pictures too. For there will be GM Diesels ready to serve wherever America needs power.

OUT of every war has grown a new era in transportation. This one is no exception. The pattern of that new era had been set, even before this war, by the General Motors Diesel Locomotive. And its Leadership in the Peace to come is forecast in the way this locomotive is today meeting the challenges of war.



LOCOMOTIVES.....ELECTRO-MOTIVE DIVISION, La Grange, Ill.

ENGINES...150 to 2000 H.P....CLEVELAND DIESEL ENGINE DIVISION, Cleveland, Ohio

ENGINES....15 to 250 H.P.....DETROIT DIESEL ENGINE DIVISION, Detroit, Mich.

higher losses are concentrated in the industrial and food processing fields—where they hurt the most.

There has been little or no increase in residential fires. Forest fires have been serious; enough timber was destroyed in forest fires in the spring to build 20,000 Liberty ships. Fires on farms and in rural areas are running lower today than at any time in the past 20 years. BUT it is in the war plants that the flames are getting in their dirty work—turning potential production, equipment and finished products into ashes.

Little enemy sabotage

THANKS to the vigilance of the F.B.I. and of the factory owners themselves, there has been practically no real enemy sabotage so far in this war. But every fire which reduces our war effort is, in effect, sabotage.

Fire stopped production of aviation gasoline in a Midwest refinery, the largest in the world. Fire destroyed an airplane propeller plant—and completed planes in other plants had to be held up for lack of propellers at a time when we and our allies had insufficient air protection.

Fire caused \$500,000 damage in a Maryland plant making rubber foot-

wear; wrecked a steel products plant in Denver making projectiles for anti-tank guns; destroyed a veneer plant in Wisconsin, one of the largest in the world, making veneer for aircraft.

Huge quantities of copra were burned up in a \$500,000 blaze on a New York City pier. An egg products company in Dubuque and 250,000 pounds of powdered eggs were destroyed by fire; loss: \$450,000.

Two pier terminals in Seattle, Wash., went up in flames with a loss of about \$250,000. Oregon and Washington had three lumber mill fires with losses totaling \$900,000.

"There were about as many big industrial fires in the first four months of 1943," says Dr. David J. Price, president of the National Fire Prevention Association, "as occurred during the entire year of 1942."

These fires have seriously affected our war effort. The sad part of it is that most of them could have been prevented—or, at least the resulting damage could have been kept down—if proper precautions had been taken. Let us look at a few specific cases:

In February, two fires—one in Saginaw, Texas, and the other in Oakland, Calif.—wiped out enough stored cereal to provide cereal rations for an army of 40 divisions, 600,000 men, for

a full year. That much grain represents a year's work by 2,000 farmers on 150,000 acres of wheatland. Moreover, the equipment lost was sufficient to process and store cereal foodstuffs for millions of civilians.

The first fire was caused by a dust explosion which resulted from inadequate cleaning and lack of proper ventilation. Origin of the second fire is unknown—but this fire might have been a small one except that, when the firemen arrived, they found only two hydrants available and insufficient water pressure. Loss for both fires: \$6,750,000.

Critical goods destroyed

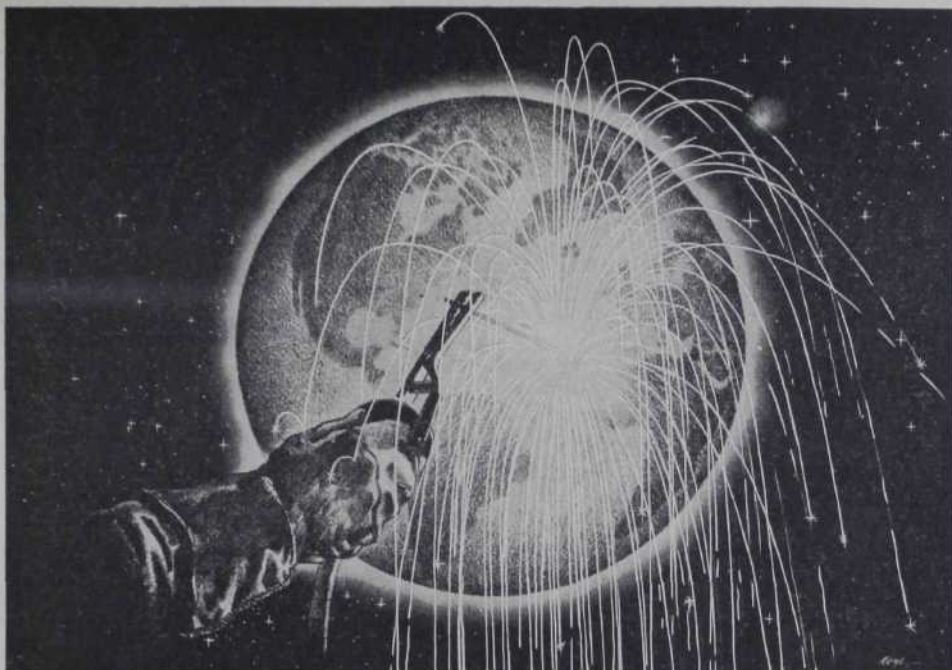
CRITICAL materials were destroyed when two fires, four days apart, broke out in a public warehouse in New Bedford, Mass., where 1,500 bales of cotton and 10,500 bales of government-owned jute were stored.

The first fire started when a workman tried to plug in an extension cord for an electric hoist. A defect in the outlet caused sparks which ignited the surface fibers on a nearby bale of cotton. Flames spread rapidly to other bales of cotton and got out of control almost immediately.

The second fire started during sal-



Forest fires last spring destroyed enough timber to build 20,000 Liberty ships, but the big increase in fires in America in recent months has been in our industrial plants



WELDING THE WORLD OF TOMORROW

In every phase of your peacetime living—in your home and your travels, at work and play—you will enjoy greater convenience and economies, new comfort and safety, all gifts of the war-proved science of welding.

★ ★ ★

A squadron of burly tanks thunders into action—nimble, deadly... WELDED!... Trim navy patrol craft slide from the ways—from stem to stern... WELDED!... Howitzer carriages, anti-aircraft gun mounts, trench mortars, mounts for huge cannon... WELDED!... Thousands of light-weight railroad cars built in the last decade by Pullman-Standard have been WELDED!

Spurred by war's vast demands, industry is welding everything that can be welded—to gain extra strength, save metal, lessen weight and hasten production. For in two high-pressure war years, welding science has been advanced at least ten years—has perfected better methods for welding a far wider range of metals; and welding speeds have been greatly multiplied.

Welding "know-how" since 1911

Helping to guide this development in paths of greatest usefulness are the plants of Pullman-Standard. We know welding of old, for we began welding parts of passengers cars as early as 1911. Out of our plants have come vital new methods and new devices, to simplify and broaden welding practice. That welding "know-how"—plus sectionalized fabrication—was the reason the Navy selected Pullman-Standard to build ships.

To you and your everyday living in the world of tomorrow, this extraordinary development of welding science means lower cost, durability, lighter weight, greater strength, and safety.

Your beds, your chairs, your desk... your refrigerator, cooking range, laundry appliances, heating plant... the gleaming kitchen shelves, and countless useful utensils... all WELDED. Structural skeletons of your

children's school, your public buildings, your bridges and factories... WELDED. The great liners of air and sea... WELDED. The buses and trolley coaches, cars for elevated roads, subways and street railways... all WELDED. Aircraft and jeeps, pipe lines (the "Big Inch"), the huge machines and machine tools that shape and finish thousands of products; *All have weldments.* Even armor plate for our fighting ships, long considered a welding "impossible"... today is WELDED!

Here are the benefits that welding brings to railway transportation in passenger and freight cars

Truly it is difficult to think of another industry that will gain so much from welding technique perfected and proved in the great laboratory of war production. Think how every ton saved in freight car weight means an additional pay load that can be carried. Think of the thousands upon thousands of useless pounds of dead weight eliminated from each passenger car without sacrificing safety. Think of the benefits of longer lived cars, and of the money that welding will save for the railroads through lower operating costs.

To make sure that Transportation gets those benefits is a stirring assignment for Pullman-Standard. Here you find the essential experience. Here is the basic technical knowledge, seasoned by mastering war production tasks in astonishing variety.

★ ★ ★

And, above all, here are Men!... a smooth-working, disciplined team: Men of canny resourcefulness, men zealous to do a good job, men full of restless urge to find better ways! And the star that guides them—bright beacon leading to a world of new and greater convenience and economy, comfort and safety—is the blazing arc of the welder!

BUY MORE WAR BONDS AND STAMPS!

PULLMAN-STANDARD CAR MANUFACTURING COMPANY

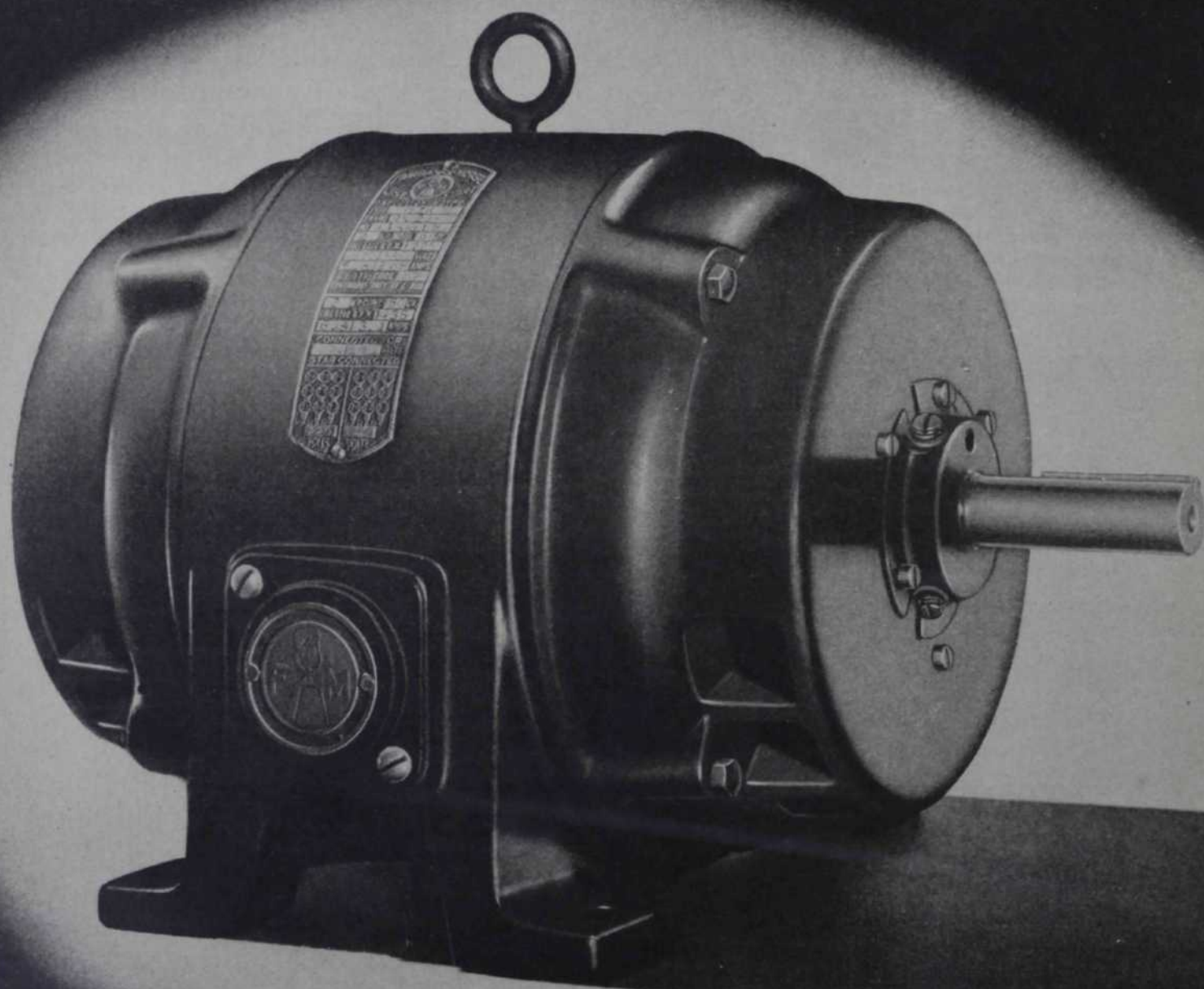
Chicago, Illinois... Offices in seven cities... Manufacturing plants in six cities

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NATION'S BUSINESS for September, 1943

61

→ **NEW**



WITH *Copperspun* ROTOR

FAIRBANKS - MORSE

MOTOR

Here is a motor—different from any you have ever seen.

It is a challenge to future motor design—because it includes more versatility, more stamina, more protection than was ever put into one housing before.

- It is a 40°C motor—with a ventilating system you will want to know about!
- It is a protected-type motor!
- It has the most adaptable, convenient, and handiest conduit box you ever laid your eyes on!
- It has the famous Fairbanks-Morse COPPERSPUN Rotor!

A demonstration is necessary to fully appreciate the many unique features of this motor.

You will want to know all about this new Fairbanks-Morse Motor—especially if you are now buying motors for a war task but want them to be up to the minute when the time comes for post-war production.

Write Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago, Ill., for full information.

FAIRBANKS - MORSE

DIESEL ENGINES
PUMPS
MOTORS
GENERATORS
RAILROAD EQUIPMENT

WATER SYSTEMS
SCALES
STOKERS
FARM EQUIPMENT



Motors



Cut **AIR EXPRESS COSTS** by packing compactly



AIR EXPRESS shipments receive such careful handling that the need for heavy cases and bulky packing is often eliminated. Whether your shipment weighs a pound or a ton, follow these two simple rules to cut **AIR EXPRESS** costs and to save space vitally needed for war goods:

1. Pack compactly, but securely—to obtain best ratio of size to weight.
2. Break large shipments into smaller units whenever possible.

And for fastest delivery—ship early, as soon as package is ready—as early in the day as possible.

Air Express Speeds War Program

TODAY, **AIR EXPRESS** not only serves the home front but is also working hand in hand with the Army and Navy to supply our fighting fronts the world over.

TOMORROW, **AIR EXPRESS** will girdle the globe in international peacetime commerce . . . to bring *all* foreign markets to the doorstep of American business.



Phone RAILWAY EXPRESS AGENCY, AIR EXPRESS DIVISION

Representing the AIRLINES of the United States

WRITE for our quick-reference handbook on "How to Ship by AIR EXPRESS During Wartime." Dept. PR-3, Railway Express Agency, 230 Park Ave., New York 17, N. Y.

vage operations. Jute on the ground near the warehouse caught fire, either from a match dropped by a smoker or from a spark from a gasoline-engine-driven crane. Loss: \$400,000.

Throughout the country in recent months, there has been almost an epidemic of fires, large and small, in tire recapping plants. Property damage has totaled hundreds of thousands of dollars.

Fires Like These Help the Enemy

Magnesium plant, Las Vegas, N. M., destroyed together with valuable records and drawings. Loss: \$750,000.

Starch plant in Indianapolis destroyed together with records. Loss: \$700,000.

Airport hangars, South San Francisco. Loss: \$500,000.

Grocery warehouse, Carbondale, Ill. Loss: \$740,000.

Shipyards, Providence, R. I. Loss: \$1,700,000.

Sardine canning plants, San Pedro, Calif., working on government orders. Loss: \$1,200,000.

Woodworking plant, Marion, Va., filling orders for airplane parts, destroyed along with other nearby buildings. Loss: \$1,030,000.

Cottonseed and soybean mill and warehouse, Cairo, Ill. Loss: \$650,000.

Warehouse, Galveston, Texas, containing 8,500 bales of cotton. Loss: \$600,000.

Not only have large amounts of critical rubber and thousands of tires been destroyed, but essential private transportation has suffered.

Fire hazards in tire recapping plants include solvents, rubber cement, also rubber dust and particles buffed off the casing when the original tread is removed before recapping. These hazards are not especially hard to control. In the plants which caught fire, however, there was a notable lack of facilities for carrying away the highly flammable rubber dust. Others lacked fire protection of any kind, even a bucket of sand for use as an extinguisher.

Because fire is an ever-present danger, because "accidents do happen," and because human nature is what it is, there doubtless will always be industrial fires. But most of them seem uncalled for.

In an eastern factory not long ago, employees kept stopping at their work to sniff. They smelled smoke, but couldn't tell where it came from. It seemed not to occur to anyone to do anything about it. No one called the fire department to investigate.

After a few days, the men in the factory got used to the smell of smoke and put it out of their minds. Suddenly, *Poof!* One whole wall of the plant burst into flame. The plant was almost gone before the fire could be put out. It has not yet been reopened, probably won't be. Forty-three per cent of all business and industrial establishments damaged by fire never open their doors for business again.

What caused the fire? A 90-ampere fuse had been substituted for a 60-am-

"Back the Attack—with War Bonds!"



Copyright 1943—Philco Corporation

BEGINNING September 9th, the battle cry of America's home front is, "Back the Attack—with War Bonds." The Third War Loan is on. The goal is fifteen billion dollars. To reach it, Uncle Sam is asking every American, *as an individual*, to join the offensive and buy an *extra* War Bond during September.

America is on the move, thanks to the courage and valor of our men on the battle front, the toil and sacrifice of the home front, the might and ingenuity of the industrial front. This is no time to relax . . . it

In cooperation with the U. S. Treasury Dept., the Philco series by America's leading editorial cartoonists is being devoted during September to the Third War Loan. While available, a reproduction of this Sid Hix original will be sent, free, on request to Philco Corporation, Philadelphia, Pa. Ask for Cartoon No. 65L.

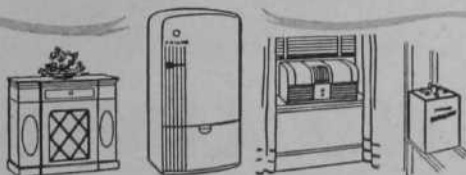
is the hour to *press the attack!* Our soldiers and sailors are doing it, under the magnificent guidance of their heroic leaders. Industrial America is doing it. The men and women of Philco, today, are producing radio, communications and

electronic equipment, ordnance and storage batteries at an all-time peak. Now we of the home front must do it . . . each one of us . . . during September! Buy an *extra* War Bond to back the attack of our boys at the front. It's a personal investment in victory today . . . and the fruits of victory tomorrow.

PHILCO CORPORATION

"BACK THE ATTACK WITH WAR BONDS"

During the Third War Loan in September Buy an **EXTRA** War Bond . . . for Victory.



Philco distributors and dealers are doing their utmost under wartime conditions to service your Philco Radio, Phonograph, Refrigerator, Air Conditioner, or Industrial Storage Battery.

LISTEN TO "OUR SECRET WEAPON"

Hear Rex Stout expose Axis lies and propaganda. Every Friday evening, CBS stations.





FEARLESS

BUD—just a clean, wholesome, fearless American boy... and his dog... thinking about tomorrow's ball game, about batting in clean-up position, about what he'll do to that Bearcat's pitcher. He knows there's a war going on. Sure he does. His brother Bill told him about it... Bill, who's over there helping to win it... and when his country needs Bud, he too, will do his part fearlessly.

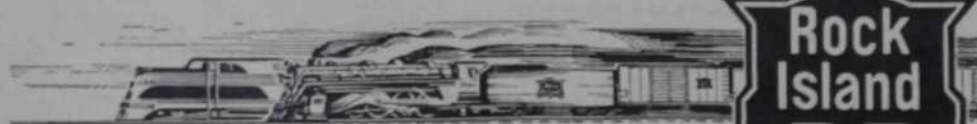
Young America! Fun-loving, hard-playing youngsters. There could be no America without them. Today, they're developing keen, alert minds and strong, active bodies; tomorrow, they'll be guiding the Nation's destiny. They'll be running America's railroads, bridging the gap between producer and consumer; between where you are and where you want to go.

When Bud and his generation take over, ROCK ISLAND LINES will be an even greater railroad than it is today. Our Program of Planned Progress assures that. For, despite shortages of man-power and materials; and although, with the other railroads, we are doing for Uncle Sam a most profoundly important job, we are constantly building for the future... for America... for that America which one day we want Bud and his pals to inherit.

As yesterday—and today—so tomorrow ROCK ISLAND'S sole purpose is to provide the finest in transportation.

KEEP AMERICA FEARLESS • BUY WAR BONDS

ROCK ISLAND LINES



ONE OF AMERICA'S RAILROADS • ALL UNITED FOR VICTORY

pere fuse which had blown out. It was the work of a new maintenance man. He, of course, should have known better, perhaps did. The wire overheated and set the wall to smouldering.

Most people who have anything to do with electricity know that the purpose of an electric fuse is to provide a weak place in the power line so that, in case of an overload or short circuit, the fuse will blow out and the wire will not be heated up. Yet about 70,000 fires are caused in America every year by people who—knowingly or otherwise—put in a stronger fuse than should be used, or make some other common misuse of electric wiring.

People take chances

PEOPLE instinctively know the danger of fire, but they get to thinking that it is something which is likely to break out in the *other fellow's* home, office or plant. In the experience of the average individual, fires occur so infrequently that the possibility of a fire seems remote. So individuals take chances with fire and the chances add up to a mighty toll.

For more than 20 years, the National Fire Waste Council (made up of 33 member organizations) and the National Chamber of Commerce have been carrying on a continuous nation-wide educational campaign, reminding people to guard against fire—and showing them how to do it.

In 1924, when this campaign was first launched, annual fire losses in America totaled more than \$500,000,000. As more and more communities took part in the campaign—one activity of which is the annual Inter-Chamber Fire Waste Contest—fire losses were reduced. In many communities, they were cut in half; in others, losses were cut to as low as ten per cent of what they had previously been. In 1935, our annual fire toll reached a low of \$250,000,000.

Pressure of war work has boosted America's fire toll in recent years. It went up to \$315,000,000 in 1942; threatens to reach \$400,000,000 in 1943. The toll would be higher still, were it not that hundreds of cities are now working to keep it down to the minimum by participating in this year's Fire Waste Contest and by promoting Fire Prevention Week, October 3-9.

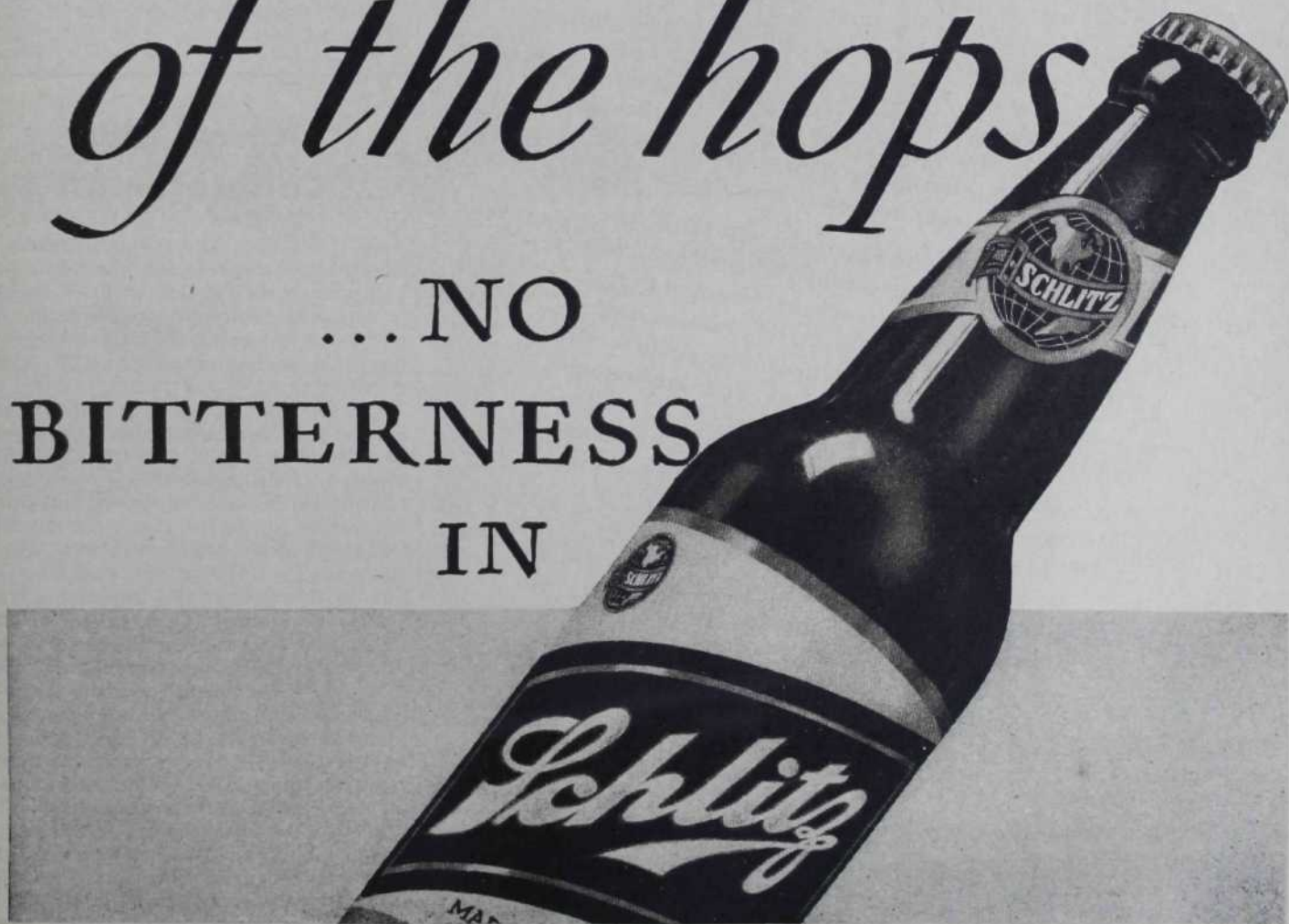
Fire prevention and protection against fire loss is a matter of *taking fire seriously*, not passing it off as someone else's worry. It is a matter of taking steps to do something about it *before* it happens; and of *being prepared to deal with it* quickly and effectively if it does happen.

Here are a few things to keep in mind—and to put in practice:

1. Keep your plant or place of business in order, free from all unnecessary fire hazards. Ask your local fire department for a periodic check-up. "Inspection, detection, correction!" That's the magic fire extinguisher which puts out fires before they happen.
2. Do not store your high-value stock all in one place. Put it in separate build-

YOU GET *Just*
the KISS
of the hops

...NO
BITTERNESS
IN



THE BEER THAT MADE MILWAUKEE FAMOUS



Copy. 1943, Jos. Schlitz Brewing Co., Milwaukee, Wis.

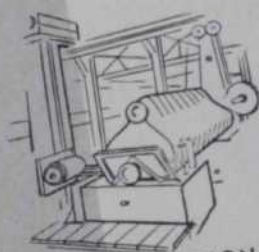
Need SPECIAL MACHINERY?

Whether it is for immediate use or for your post-war production, now is the time to take advantage of the extraordinary engineering and manufacturing facilities which are available at Whiting.



ENGINEERING
EXPERIENCE

Whiting engineers have long experience in designing such diverse products as foundry, aviation, and chemical equipment. They have engineered numerous items of war equipment. The present lull in the latter activity brings an opportunity for you to use their skill in designing special equipment or machinery needed in your operations.



PRODUCTION
FACILITIES

Production facilities at Whiting permit the fabrication of special products under the direct supervision of design engineers. They have complete foundry, machine shop, welding, structural, assembly, electrical, and laboratory facilities at their disposal, and a trained, experienced personnel capable of carrying out intricate and difficult construction assignments.

We invite an opportunity to place these facilities at your disposal, subject only to our commitments for war production. Whiting Corporation, 15677 Lathrop Ave., Harvey, Ill.

WHITING

CORPORATION

For Nearly 60 Years
TIME-SAVING EQUIPMENT FOR INDUSTRY

ings, if possible; or in separate piles with ample space between them. Small piles mean small fires.

3. If your operations involve flammable or explosive materials, limit the amounts in your workrooms to the absolute minimum.
4. Provide as much private fire protection as you can, including sprinklers, fire alarms, first aid materials—and a good supply of water. More important still, keep this equipment in good working order.
5. Talk over your fire prevention and fire control problems with your local fire chief and with the men in the companies which handle your fire insurance. They can give you good sound help out of their experience and research work. Follow their suggestions and advice.
6. Make all your employees fire conscious. Prove to them first, however, that you are fire-conscious yourself. See that your workers know what to do in case of fire.

The fight against fire is a continuous one. It is a doing process, not a postponing process, and something you have to keep everlastingly at. But it pays enormous dividends.

Know Your Congressman

THE UNITED STATES Chamber of Commerce has prepared, and will make available upon request, a brief review of action and roll-call votes on bills supported or opposed by the Chamber during the first six months of the 78th Congress.

The review covers such important subjects as debt limitation and repeal of the salary limitation, the Connally-Smith anti-strike bill, the pay-as-you-go tax bill, extension of the reciprocal trade agreement authority, funds for the National Youth Administration, price subsidies, the Hobbs anti-racketeering bill, continuation of the Dies committee.

Eric A. Johnston, president of the Chamber, stresses the importance of knowing your congressmen and senators, and their voting records. Issues of transcendent importance may be acted upon before this Congress expires in January, 1945, he points out, including taxation, renegotiation and termination of war contracts, disposition of surplus war properties, postwar operation of government-owned plants, labor policy, new social security legislation, demobilization of the armed forces, relinquishment of wartime controls, and international trade and commerce.

"It is imperative," says Mr. Johnston, "that you take advantage of every opportunity from this point on to know your representatives and senators—to exchange ideas with them—to make practical, positive, and constructive suggestions which will help them in meeting intelligently the overwhelming problems which face them."

THIS ISN'T NECESSARY—

"He thinks he's figured out a new accounting machine using the telephone dial!"



YOU CAN RENT COMPTOMETER EQUIPMENT!

- Put the phone back on the hook, George, and quit worrying. Because even if your priority doesn't permit you to buy Comptometer calculating machines these days, you *can* rent them for limited periods of time.
- Use that telephone to call your local Comptometer Co. representative. He'll be glad to explain this important and economical service. The Comptometer is made only by the Felt & Tarrant Mfg. Co., 1712 N. Paulina St., Chicago, Ill.

**BACK THE ATTACK—
WITH WAR BONDS**

COMPTOMETER

ADDING-CALCULATING MACHINES AND METHODS

REG. U. S. PAT. OFF.

Labor's Stake in Capitalism

(Continued from page 27)

opposed and helped to defeat. But how about the Reconstruction Finance Corporation, the Federal Housing Administration, the countless other legislative devices designed to help business and industry? Why, our statute books are loaded down with laws sought by Industry; laws giving a competitive advantage against oleomargarine; laws giving one section an advantage over another in the matter of freight rates; laws sought by segments of industry against their competitors. There are laws designed to protect the little business man against the big fellow, and undoubtedly vice versa. There are laws on everything!

Where do we go from here?

BUT all of this is neither here nor there. We have all come a long way from the rugged individualism of our forefathers. The question is where do we go from here?

We in the A. F. of L. are deeply concerned about those in places of influence, inside and outside of the Government who plan increasing government control of Industry after the war.

Our boys returning from the war want to live under the private enterprise their fathers and forefathers built. The workers of the A. F. of L. believe in that system. They do not want a government-dominated economy. They do not want their wages and living conditions to be the subject of political bartering and manipulation. They want to pursue their lives as free men and they know this cannot be done under state con-

trolled economics. They have seen the experience of workers in totalitarian countries.

Yet we know that the postwar period will bring a challenge such as our system of free enterprise has never known. Millions of returning soldiers, millions of workers now making war materials, will have to be absorbed. Unless private industry provides the jobs, the Government will do it.

The great danger to our way of living is that it will be all too ready to step in without giving private industry an opportunity first. The prime duty of all of us, it would seem to me, irrespective of whether we are in Labor, Industry, Agriculture, or the Professions, is to make sure that Industry gets the opportunity. Regardless of the many differences we have on other scores, this should be something on which we should unhesitatingly unite. And insofar as our part is concerned, I speak from a long experience when I say that I believe the American Federation of Labor is the greatest single bulwark of the private enterprise system left today.

The growth of our organization coincides with the industrialization of this country. We are part and parcel of it. We have the weaknesses, we have the strength of America. President William Green and others have frequently stated that we want no part in Industry's management; management is management's responsibility. Throughout the country we have labor-management committees in plants but they exist to help the employer to increase his production, to work out his problems. They do not seek to take over the operation

of his plants. Among the Federation's recent recommendations to Congress was:

"Provision should be made for the return, in cash, after the war, of a part of the present high taxes. We can well be guided by the English policy which proposes to return a high percentage of the taxes now assessed against low income workers. Corporations also need a postwar reserve to convert their facilities from war use to peace use in order to maintain employment. We think that any corporation called on to pay more than 75 per cent of its total net income under the war taxation laws should be eligible to receive a refund of such excess when the war is over."

The Federation's executive council refused to support the proposal to limit incomes to \$25,000.

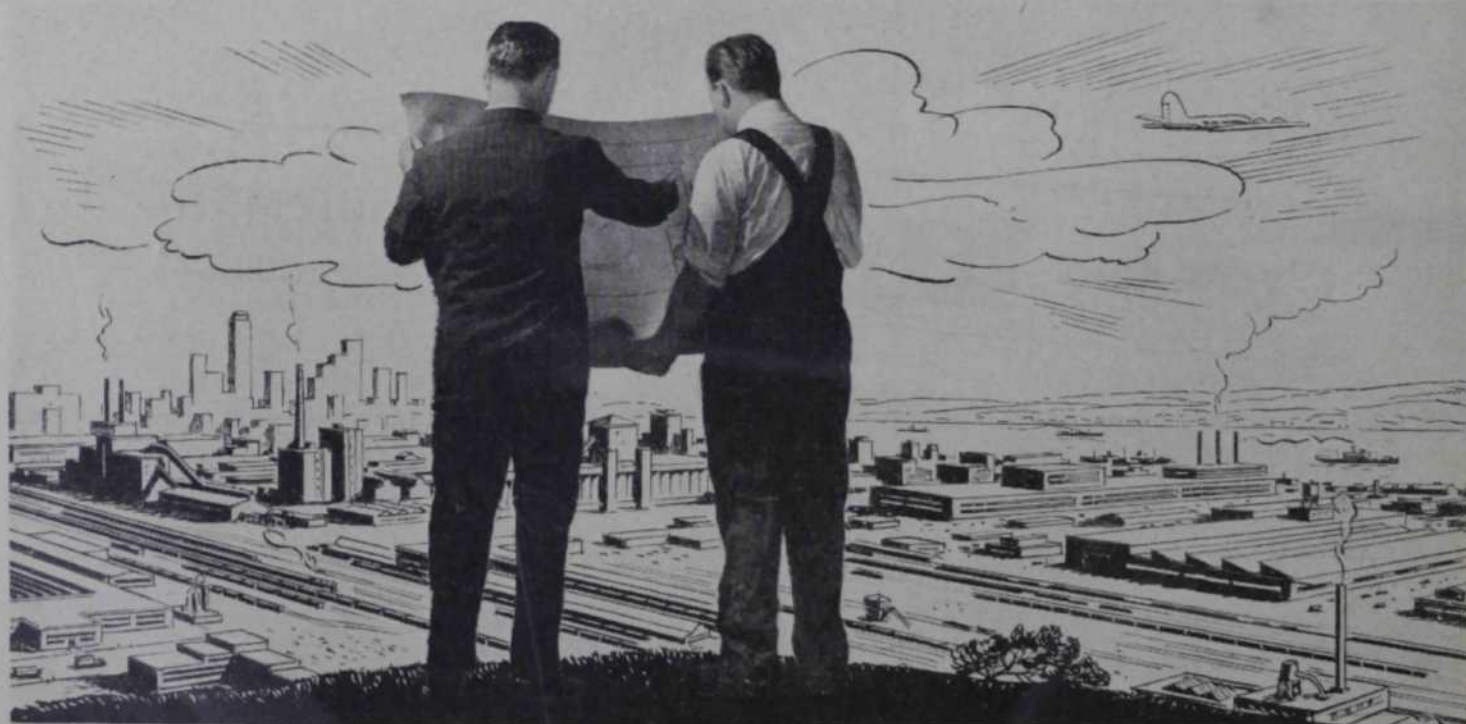
For free enterprise

FOR some time we have had a committee planning for the postwar period. It is under the chairmanship of Matthew A. Woll. I don't think anyone has ever described him as a radical. All of this committee's studies are within the four corners of the private enterprise system.

Before Pearl Harbor there was a tremendous agitation against our industrialists, on the grounds that they were appeasers. There was a steady drive to force them to overnight conversion of their plants, at a time when our Government's plans and needs were most vague. There was more behind this agitation than a concern about preparedness. But the agitation did not come from us.

Make no mistake about it, we of Labor are fully aware of our stake in the system of private ownership and operation.

But I often wonder if all our indus-



"We believe that Labor and Industry should stand shoulder to shoulder in meeting their mutual problems rather than running to Government for help in the solution"



DREAM OF GENERATIONS—Kodachrome snapshots are printed on paper—made from color negatives in an ordinary roll-film camera.

Use the limited amount of Kodachrome Film now available to send your Service man an occasional FULL-COLOR snapshot from home.

Kodak research has made Color Photography a part of everyone's life

Back in 1928, Kodak brought out a film for making home movies in full color. It was merely a start, in the light of what has been done since, but it was the first of its kind, and it brought joy and satisfaction to a great many people.

In 1935, Kodak introduced full-color Kodachrome Film for home movies—and it "had everything." Projected on the screen, it showed, in radiant color, the big moments of "family history"... Now, Kodachrome is shooting records of actual combat for the Army, Navy, and Air Force—for military study, and for training.

The year after, Kodachrome "still pictures," shot with a Kodak Bantam

or 35-mm. camera, and projected on a screen, were a new joy to thousands.

In 1938, the introduction of Kodachrome sheet film led to full-color photographs as illustrations in magazines and newspapers. By showing attractive foods and new things in home decoration, color photography was a guide to better living. With pictures of remote, colorful countries, it brought home the world "as is."

In 1941, color photography moved closer to the familiar black-and-white snapshot—Minicolor prints from miniature Kodachrome Film were made available by Kodak. And for

professionals, Kodachrome prints made from Kodachrome Film in larger sizes. Projection on a screen was no longer the only means of enjoyment... But full-color prints on paper were still to come.

Last year, 1942, the cycle was complete. Kodachrome Film, usable in ordinary cameras and processed by Kodak, yields Kodachrome prints on paper. The methods of making full-color photography as universal as black-and-white are now fully known.

Now, Kodak Color Films are "in the service"—better to watch our enemies from the air, and penetrate their camouflage... to record our troops and ships and planes in action... and to train our men... Eastman Kodak Co., Rochester, N. Y.

Serving human progress through Photography



ARMY'S B-26 MARAUDER



THEY'RE WRITING HEADLINES
WITH A

MARTIN MARAUDER

ALEX... JOE... STEVE... ED... and BILL. You know them. Alex, who used to bring your groceries... Joe... Steve... Ed and Bill, who used to go with little Sally Miller. Likeable, quick-to-laugh young Americans. Give them the best aerial schooling in the world, put them in a rocket-fast, Martin B-26 Marauder, and they're a flyin', fightin' team that wins!

There's a reason for this, of course. Aircraft are highly complicated mechanical devices... and these boys were fitting

together gadgets, tinkering with tools, racing old jalopies, when their adversaries were learning to "heil" and "banzai." They've got the feel of speed, the mechanical know-how that makes natural pilots, gunners and bombardiers.

This same technical skill gives America fighting planes like the Martin B-26 Marauder. Sleek, graceful, packed with speed, power and punch, it's the kind of plane that makes young America's eyes light up... makes him say, "Put me down for the Air Force!"



BRITAIN'S BALTIMORE

What's more, American technical skill is going to play a major role in fashioning the future. Already Martin has designed giant airliners of 125 or more tons... mighty ships that will bring distant nations to within hours of your doorstep. At the same time, our Army and Navy airmen, imbued with the thrill of flight, the love of speed, are resolving never to be shackled to earth again. They're in the air... to stay!

Alex... Joe... Steve... Ed... and Bill. They're doing more than win a war. They're building a world that will take your breath away.

THE GLENN L. MARTIN CO., BALTIMORE
THE GLENN L. MARTIN-NEBRASKA COMPANY—OMAHA



NAVY'S MARTIN TRANSPORT



NAVY'S MARINER PATROL BOMBER

Martin

AIRCRAFT

Builders of Dependable Aircraft Since 1909



Industrialists are equally aware of theirs. It was not the workers of either Italy or Germany that went in for totalitarianism. Those movements were encouraged by industrialists who wanted to "bring order out of chaos," as they quaintly expressed it.

In our present crisis, too many of our builders, men of energy, private enterprise entrepreneurs, have given up the hope of gratifying their ambitions except through Government channels.

We believe that Labor and Industry should stand shoulder to shoulder in combatting this trend. Indeed, we believe that we must work out our problems together instead of constantly running to the Government for their solution; or the Government will most surely continue to move in on both of us.

We want Industry to have its profits in order that we can have our just share of those profits. We believe our workers should be permitted the freedom of their joint bargaining efforts to make sure they will receive their share of these profits. We believe that men, not necessarily gifted in individual articulation, should have the benefit of combined articulation. We seek the same freedom of enterprise in the betterment of our lives which we beseech for Industry.

Will there be this closer cooperation between the two groups? Frankly, I don't know. We in the Federation have looked askance at the increasing government controls over Industry; necessary, undoubtedly, in war time. But the agitation for these controls, for even more rigid controls, looking to a continuation of the controls after the war, has not come from us. Yet we have constantly faced the question:

"Now, that Industry has been 'regimented,' Labor should likewise be regimented." Why?

Why should a group of people forced to accept certain controls, because of the exigencies of war, want to force them unnecessarily on another group? What satisfaction would they get? But, more important, if one group is to act in this vindictive way against another group, we are all in a fair way to land in the same regimented boat after the war.

An attack on Labor

A FEW months ago we faced a tremendous agitation on the grounds of "absenteeism." Those of us in places of responsibility in Labor had to divert our energies from ways of improving war production, from ways of improving our relationships with management, to combatting this agitation. It was months before we could even get across the thought that there were two absenteeisms—forced and wilful. The whole thing was an undisguised attack on us.

In fairness, much of the agitation against us does not come from the individual industrialist with whom we work. In my 44 years of experience, I have found few employers with whom I could not eventually reach an understanding.

To a great extent, the ill-feeling between Industry and Labor is brought



YOU SAID that the great American war production schedule was the bunk—all on paper!

Well, you've done a lot of paper work in your day. And unless you're awfully good at it, *and we understand that you weren't*, you can get terrifically tangled up in it.

If you could take a peek into the Detroit Tap & Tool Company plant today, Herr Hitler, you'd know you had gotten tangled up in some American paper work. You'd see how we're helping turn ink figures into the greatest mass of war equipment ever produced in history!

Detroit Taps, Thread Hobs, Thread Gages, Custom-built Threading Tools and Gages for highly specialized equipment... all miracles of accuracy are created by experienced workers whose effort, skill and thoroughness are dedicated to your downfall, Mr. Hitler.

In the plants of our customers these Threading Tools are helping build tanks that are ripping your Panzer Divisions to shreds, bombers that are leveling your Ruhr industrial cities, P. T. Boats that are making oil slicks out of your U Boats—materiel that a short time ago was only on paper.

You've done your bit—now do your best

BUY UNITED STATES WAR BONDS

DETROIT
TAP & TOOL CO.

8432 BUTLER AVENUE • DETROIT, MICHIGAN

GROUND TAPS • GROUND THREAD HOBS • THREAD GAGES
SPECIAL THREADING TOOLS AND GAGES

Cutting It Down!



JACOBS AIRCRAFT Engines

The old map is rapidly being cut down—distances are being reduced from days or weeks to hours.

The countries of Latin America, once our distant friends, are truly becoming our next-door neighbors. Inter-American travel will grow by leaps and bounds after the war. The vacationist will be able to swim at the glorious beaches of Rio on Saturday and be back at work Monday. Round trips on business during the week will be commonplace.

Modern light Airliners, powered by efficient, dependable Jacobs Engines, will provide rapid and easy travel from the international airline terminals to the interiors of these countries, opening their unlimited resources and beauty to us all.

All this will come after the war—but how soon it will come depends on how well we do our War Job **NOW**.



JACOBS AIRCRAFT ENGINE CO.
POTTSTOWN, PENNSYLVANIA, U. S. A.



about by those who have little knowledge of either. The professional controversialists are, I think, the worst offenders. They align themselves on the "anti-labor" or the "labor" side and speak freely without benefit of facts. Only recently I read an article by a young columnist. Having found 28 government agencies dealing in one way or another with labor problems, he concluded that we were dominating the Government. It is no source of happiness to us that 28 government agencies are forever on our necks.

Damned as dictators

MANY editors also are forever damning us as "dictators" and again demanding, in this episode or that, that we be dictators. Believe it or not, those of us, who have risen to places of responsibility in the Federation, do not have the power or the disposition to turn the spout on or off. We represent our membership to the limit of our abilities, and we try to exercise our responsibilities as citizens in doing this.

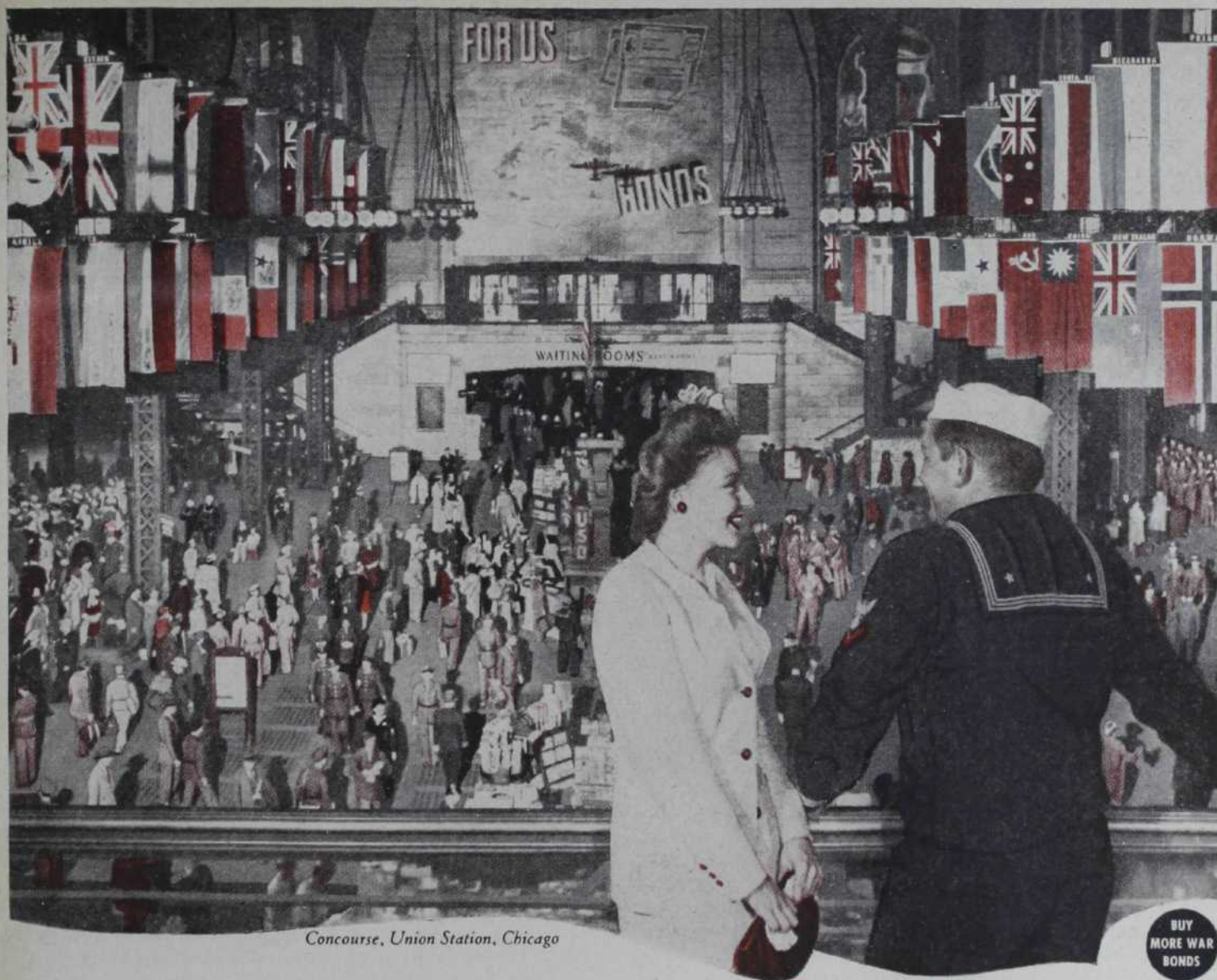
Personally, I believe that no small part of the agitation behind the recent passage of the Smith-Connally bill grew out of what many people believe to be a tie-up between Labor and Government. Certainly there was a "punish Labor" motive behind the bill.

There is no tie-up between the A. F. of L. and Government. Ours is a non-partisan organization, embracing both Republicans and Democrats in our ranks and leadership. We have varied from this nonpartisan rule only once—in 1924. I doubt seriously that we shall ever do it again.

Those people who are agitating for such things as "making Labor account for its funds" and prohibiting it from making political contributions are acting with more heat than light. They aren't concerned, either, in effecting necessary reforms. The few instances when Labor contributed to a political party are well known; they were fully advertised at the time. The organization in which I was reared, the Molders, makes a periodical and full accounting of its funds. I would venture to say this is true of the great majority of the organizations in the A. F. of L.

Granted that we could make many improvements. We are constantly doing so. But we are dealing with practical problems in a practical way. Theorizing may be a good profession with others. In our ranks it does not prevail.

If the public generally does not make a more serious effort to understand our problems, I fear that our postwar problems are going to be made more acute. Nothing will be gained, and much can be lost, by the random throwing of rocks. We will need our united energies to keep our country's economy aright. Believe me when I say that the country in general, and private industry in particular, needs the American Federation of Labor as they have never needed anything before. We are schooled against the artifices of the medicine men who thrive in such times as lie ahead.



Concourse, Union Station, Chicago

Crossroads of War...America 1943

HOUR after hour, day after day, you see them—crowding the concourses of the nation's great railroad terminals—file after file of men in olive drab and navy blue and forest green.

Over four million of them a month—entraining for camps—heading toward secret embarkation ports—coming home on leave. And more and more civilian travelers, on essential missions, swell the ever-growing throngs.

It's America at war—1943, and riding the rails as never before!

What the railroads are doing "adds up



to the greatest transportation job in history," according to Chairman Clarence F. Lea of the House Committee on Interstate and Foreign Commerce.

New passenger cars are not now available, due to wartime conditions. Yet, by dint of teamwork and resourcefulness, and through sparing neither time nor expense, heavier and heavier demands are being met.

Both passenger and freight traffic, in the dynamic midwest and vast northwest territories served by The Milwaukee Road, are at the highest levels of all times.

Nevertheless, The Milwaukee Road's 35,000 loyal employees are not complacent simply because they are handling

their wartime assignments with admirable efficiency. They know they must keep on fighting America's transportation battle unrelentingly every hour and every day of this war.

WOMEN! WAR JOBS NEED YOU NOW!



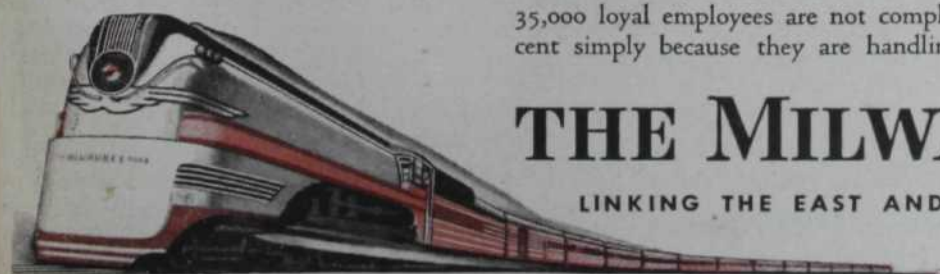
Every woman working helps hasten Victory!

Read the Newspaper Want Ad Sections or apply nearest U. S. Employment Service Office.

THE MORE WOMEN AT WORK—THE SOONER WE'LL WIN!

THE MILWAUKEE ROAD

LINKING THE EAST AND THE PORTS OF THE PACIFIC



Box Cars Pay Off in War

ALL CARS will be unloaded and returned immediately. They must not be detained for storage purposes."

"... No consideration of convenience, overtime, demurrage, average agreement, room or plans for other work can be considered as an excuse for delaying unloading inbound freight cars."

Neither of these quotations is from some current order or circular of a railroad or of the Association of American Railroads.

The first is from a general order issued by Quartermaster General M. C. Meigs of the U. S. Army on October 1, 1862.

The second is from the instructions issued 80 years later, by the president of Cargill, Inc., to the company's plant superintendents all over the country.

The Cargill Company is but one of many shippers and receivers of freight, private and public, who are putting to use the lessons on how to use railroads in wartime learned in the first war in history in which mechanized transport was employed.

The Chief Engineer of the Department of Highways of Virginia, for example, instructs all his field engineers "to unload cars on the date received, regardless of holidays and Sundays." The mayor of Cleveland forcefully reminds all city departments of "the need of quickly unloading and releasing freight cars." The president of the Cream of Wheat Company instructs its traffic manager to spare no expense in keeping freight cars rolling. The president of the Colorado Fuel & Iron Company authorizes its traffic manager to hire whatever labor and to pay whatever overtime is necessary to get cars unloaded and released without delay.

This list might be extended almost indefinitely. American industries have learned how railroads should be used in war and are assisting the railroads in the tremendous hauling job which this war demands.

IN 1862, General Meigs had neither precedent nor experience to guide him. He had to be his own teacher and his own pupil, but early in the War between the States, he hit upon the essential point:

Never hold cars under load. Make 'em empty and send 'em back for another load.

It took more than General Meigs and his orders, however, to get commanders in the field to understand the idea. Freight cars were a convenient and ready form of storage. Unloading them took men who weren't always handy, and called for work which wasn't always convenient. Besides, what difference if a hard-pressed outfit did hold a few cars? Weren't there others where they came from?

Edward M. Stanton, Secretary of War under Lincoln, saw General Meigs' point, however. On November 10, 1862, the Secretary repeated the General's order.

RAILROADS, moving more freight with less equipment than in World War I, share credit with the customers who have helped

"On arrival at depots, whether in the day or night, the cars will be instantly unloaded..."

He added: The name of "any officer who shall neglect his duty in this respect... will be stricken from the rolls of the Army."

Not even the Secretary of War was able to get ready and complete compliance. The order had to be re-issued at intervals throughout the war, each time in sharp terms and with dire consequences threatened for failure to obey.



IN THIS WAR the situation is different. The chiefs of transportation for the Army and the Navy know what ought to be done with the freight when a car gets to destination, and they are determined to see it done. Moreover, the heads of civilian industries, including those making war goods, are equally alive to the need for prompt unloading and release of cars, and equally determined to see that it is done. But—and here is the difference—they are not meeting with indifference, inertia, or opposition of those who must actually do the job, as General Meigs did in 1862.

The 20,000 traffic managers of industry have been working on this problem for nearly 20 years through the Shippers Advisory Boards. These boards are an outgrowth of the experiences of the first World War and of the chronic "car shortages" which persisted through 1922. Their members understand the causes of the troubles of those days, and the cures.

These men who actually direct the loading, routing and unloading of most freight cars know what to do and are ready and eager to do it. They need no more than direction from the heads of their concerns to establish such records as that of Cramp's Shipyard, which unloaded a straight run of 2,530 cars without holding a single one beyond the 48-hour "free time" allowed under demurrage rules.

Railroad men are the first to tell you that the job which the roads are doing would have been impossible without this cooperation from users of the roads.

A distinguishing mark of the shipper-railroad teamwork in this war is alertness in heading off jams before they develop. By way of contrast, consider what happened at Stith, Ky., 30 miles southeast of Louisville, in 1918 when the Government was running the railroads. It was decided to create there the world's largest field artillery firing center—now the world's greatest depository of gold, Fort Knox. Thousands of freight cars of materials were started to Stith, with no notice to the railroad, and with no space for their unloading except one three-car sidetrack.

Today, when a project of any sort is started, one of



The Army-Navy "E" proudly flies over Buick plants in both Flint, Mich., and Melrose Park, Ill., having been awarded to Buick people for outstanding performance in the production of war goods.



WHAT'S BETTER THAN PRECISION BOMBING?

NOTHING, perhaps. Unless it's precision bombing *plus* bigger bomb load and extra speed.

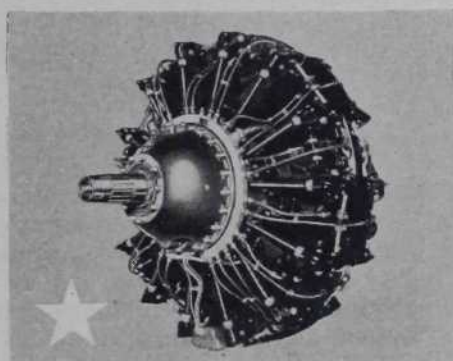
So we call your attention to the characteristics (and the deeds) of that good American bombing plane, the Liberator, shown here.

It carries a husky load over record-setting distances.

With its retracting bomb-bay doors, it takes its run over the target without halt or hesitation, so it's heart's-delight for a sharp-

eyed bombardier.

And with four big Pratt & Whitney aircraft engines, it has plenty of power and plenty of speed to



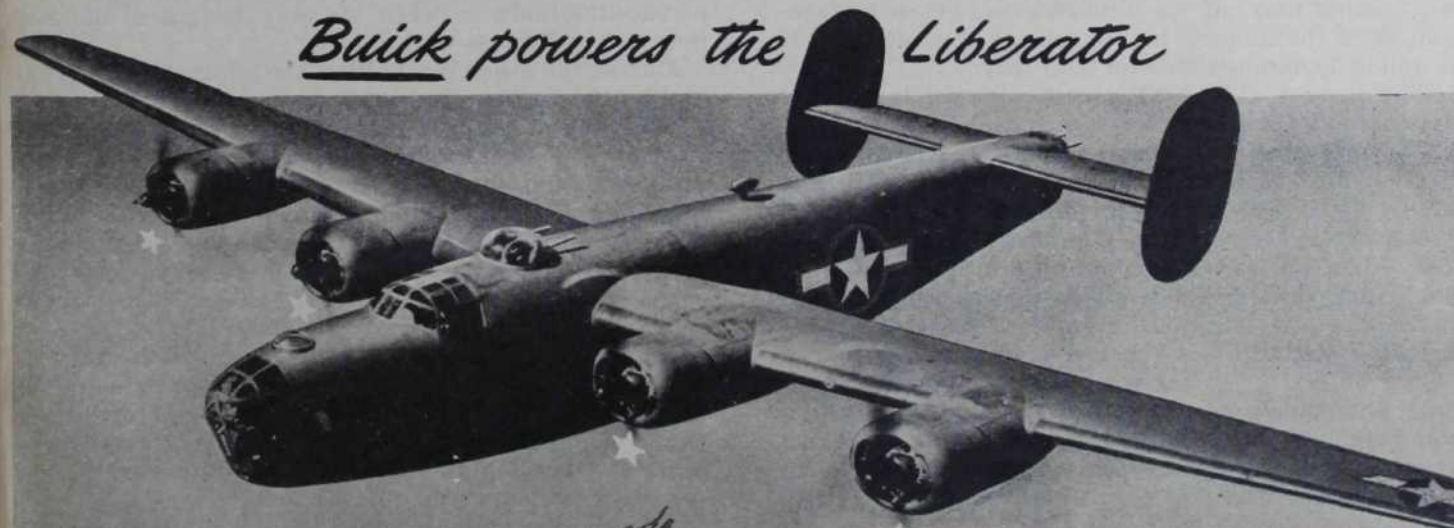
HERE'S WHERE BUICK COMES IN

get in fast, get home fast — and get back for more cracks at the enemy.

It so happens that Buick builds those engines. All the thousands we turn out go straight to plants where the Liberator gets its start in life.

Looking at its record — and it's written daily in the papers for you to read — do you blame us for taking a little honest pride in that fact?

Buick powers the Liberator



war goods
WHEN BETTER AUTOMOBILES ARE BUILT BUICK WILL BUILD THEM

BETTER BUY BONDS • **BUICK** DIVISION OF **GENERAL MOTORS** • BETTER BUY BONDS

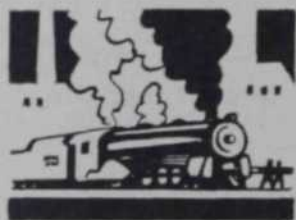
the first things done is to create an adequate track layout for handling the freight involved in construction and operation. Some of these lay-outs include more than 100 miles of track. During the great defense and war construction program, 8,000 miles of such tracks were built in one year.

"MAKING CARS" is another form of shipper cooperation. They are "made" not only by unloading them promptly but, whenever possible, loading them right out again. In a tight situation in the Southeast in July, for example, shippers themselves helped to avert threatened local box car shortages. Out of 60 refrigerator cars received, 59 were unloaded within 24 hours. The same sort of treatment of box cars "created" as many as 500 additional cars in a couple of days in this area alone.

During a week in June, out of 212 cars unloaded by the Quaker Oats Company at one of its plants, 197 were put to immediate use for outbound loading of grain and flour—commodities requiring cars of the highest class.

Not every shipper has caught the idea, of course. One lumber shipper, for instance, complained to his consignee, the Navy, that he was short five box cars needed for his shipments, when he was holding at his plant, awaiting unloading, 35 cars of the same sort. The quickest way to get five empties, as he was shown, was to make them right there, by unloading.

THIS COOPERATION between carriers and their customers takes astonishing forms sometimes. An Alabama chemical plant, engaged in war work, was about to have to shut down because of boiler trouble, until a steam locomotive of the Seaboard railroad pulled up on the industry's track and connected its boiler to the factory's steam lines. War production went ahead without interruption. A Grand Trunk locomotive played a like part at Pontiac, Mich., in May, providing emergency power to operate the city's water system.



This sort of cooperation is not one-sided, however. A Pittsburgh-Chicago freight train burst a brake pipe on the

engine, just as it was passing a pipe works. The engineer and firemen took off the broken pipe, got a replacement from the factory, had it cut and threaded, put it on, and in 35 minutes were on their way.

That sort of alertness by railroad men is another part of the story of the success with which the transportation job has been done in this war. It has found no finer example than in the case of Victor Griffith and Samuel Lampshire, assistant yardmaster and car inspector of the Denver & Rio Grande at Grand Junction, Colo. When two cars of ammunition in a freight train caught fire, these home-front heroes closed in on them from either end, uncoupled them even while they were exploding (Griffith was knocked down when the end of the car on which he was working was blown to splinters), and made it possible for switch engines, working from both ends, to pull away the rest of the train, which included other cars of ammunition, and isolate the burning cars where they would do the least harm.

THERE IS also teamwork between railroads themselves. The fact that any freight car of any railroad may go over the rails of any other is one of the important commonplaces of American commerce. Passenger

cars, however, usually stayed at "home," except in the case of certain regularly established long-distance trains running over more than one line, and, of course, in the case of the peripatetic Pullman car which goes everywhere. Locomotives are, ordinarily, even more steady "home-bodies" than are coaches.

Pearl Harbor brought about the greatest scrambling of passenger equipment ever seen on the railroads. Cars from everywhere were assembled at the southern and southwestern camps where most of the Army was in training to rush troops and equipment to places of need.

While the rush and haste of that time are absent now, the same general situation continues to such an extent that the railroads have entered into standard agreements for the use of each other's coaches in much the same way in which freight cars are interchanged. This new teamwork has led to creation of a Passenger Car Section of the Car Service Division of the Association of American Railroads similar to the long-established freight car sections.



The extent of this cooperation is indicated by a recent advertisement of the Southern Pacific which thanks connecting and competing lines for the loan of 27 critically needed locomotives, among other things.

"Today," the advertisement reads, "the railroads are applying the 'lend-lease' spirit to other wartime operating and traffic problems. For example, if another road is better able to handle a certain job, we turn it over to them (and they get the revenue involved). Other roads divert traffic to us when they are hard-pressed."

ALERT SHIPPERS, military and civilian, are part of the story, too. The 13 regional Shippers Advisory Boards have spread their organization to more than 600 shipping centers through local Car Efficiency Committees. These committees—groups of local shippers, familiar with local conditions—are determined to see that shippers do not let cars loaf on the job. They watch for accumulations of cars held under load. When there are such, they take the matter up directly with the shipper who is failing to unload. They do it as tactfully as possible but as forcefully as necessary.

These Car Efficiency Committees are symptomatic of the difference between the way freight is handled now and in the last war.

During the other World War, the effort was to decentralize and localize the whole operation.

The present method depends upon cooperation and teamwork. It calls for the exercise of less government authority and more individual responsibility. Commissioner J. Monroe Johnson, in charge of the Bureau of Service of the Interstate Commerce Commission, has said that the cooperation between shippers and railroads "passes comprehension," but Commissioner Johnson and Director Joseph B. Eastman of the Office of Defense Transportation are calling for still more.

The appeal is addressed not so much to shipping clerks or even to traffic managers as to the operating heads of business and industry who are in position to order the working arrangements and authorize the expenditures necessary to give it effect.

Because the nation's railroads, its shippers and its government agencies have so firmly grasped and so intelligently applied simple and direct principles, the job has been done, up to now, by teamwork, by local effort, by individual responsibility in keeping the cars moving. To keep on doing the job will take more of the same.

This Sewing Machine Motor Started Something!

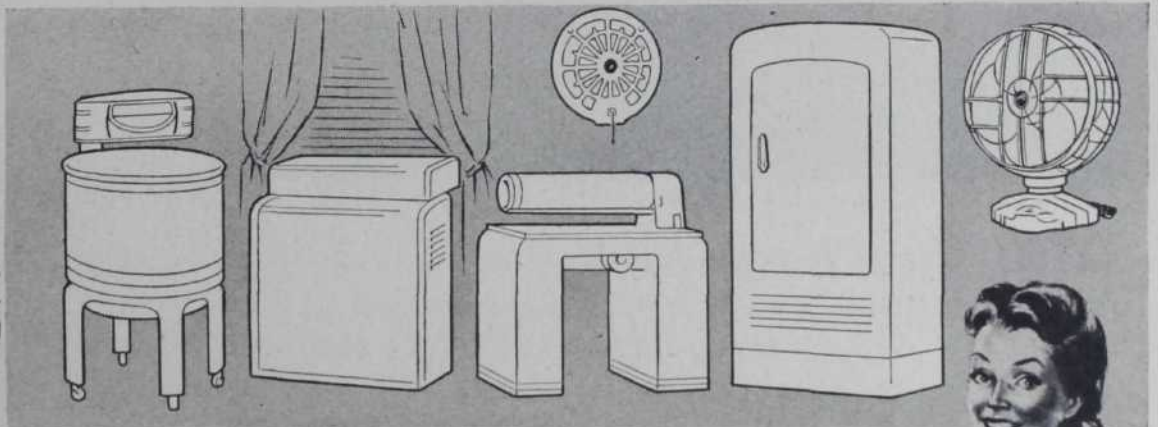
An historic event—at the turn of the century—was the development of an Emerson-Electric Motor for attachment to the foot-power sewing machine, then in use.

This simple motor application marked the beginning of an era in which an entire industry was founded, bringing a multitude of labor-saving, motor-driven appliances and comfort conveniences for the home.

Throughout this long period, Emerson-Electric Motors have played a major role in powering these appliances. They have lifted the yoke of household drudgery and created the opportunity for American Womanhood to achieve a fuller life.



THE ELECTRIC MOTOR ENTERS THE HOME!
Sewing Machine reproduced from Emerson-Electric advertising of 1899



Types of Home Appliances Powered by Emerson-Electric Motors

When war came, the entire resources of Emerson-Electric's 53 years' experience were quickly converted and tremendously expanded for manufacturing vital implements of war—power-operated revolving gun turrets, shell parts, and many new types of electric motors for aircraft.

Out of the urgencies of war will come entirely new conceptions of electric motor design, construction and efficiency. "After Victory", manufacturers of the new and improved motor-driven appliances and equipment will confidently power their products with these motors.



"Until the war, I never fully appreciated the importance of the electric motors on my home appliances."

THE EMERSON ELECTRIC MANUFACTURING COMPANY
SAINT LOUIS • Branches: New York • Detroit • Chicago • Los Angeles • Davenport



In recognition of their "patriotism and great work", Emerson-Electric workers were presented with the Army-Navy "E" Award.

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EMERSON ELECTRIC

MOTORS • FANS • APPLIANCES • A. C. ARC WELDERS

NATION'S BUSINESS for September, 1943



"Will we have long to wait, Steward?"

"No, sir, just a few minutes. We've got an extra heavy load this trip, including a lot of soldiers and sailors. And as you probably know, a large part of Seaboard's dining car equipment is being used on troop trains."

"I guess we civilians haven't any kick about that, it's up to all of us to put the war effort first."

KEEP ON BUYING WAR BONDS AND STAMPS

Remember, there's no let-up, no time-out, for our fighting men

SEABOARD RAILWAY

**WORKS
FOR
VICTORY**



THROUGH THE HEART OF THE SOUTH

Canada Shifts Her Workers

FACED with the necessity of providing some 300,000 more men for the army, war work, agriculture, lumbering and coal mining by the end of 1943, Canada is compelling workers to transfer from non-essential industries to higher priority labor. No employer can continue to employ men in the military call-up classes in non-essential industries without a permit from the National Selective Service of the Canadian Department of Labour.

The first workers affected were in retail businesses. As a result of representations by retail merchant organizations, food industries and food retail stores were given permits to keep many of the men on the job, especially in view of increased food rationing in Canada. In addition to retail selling, such industries as jewelry manufacture, greeting cards, lace goods, manufacturing of feathers and artificial flowers came under the non-essential classifications.

The list of occupations and industries now termed lowest priority for labor is large. Included are shoe shiners, entertainers, dancing teachers, waiters, elevator operators, custom furriers, green keepers, dish washers, and guides.

If you own a theatre, film agency, motion picture company, broadcasting station, bowling alley or ice cream parlor, you may not employ men in the military call-up groups. Should you be a barber or beauty shop operator, a manufacturer of art goods, a distiller of alcohol for beverages, a wholesale florist, a cleaner, dyer or presser, operator of baths, a maker of chewing gum or operator of a poolroom, you cannot employ men between 19 and 25, married or single; or single men, widowers without children, divorced or separated men without children, up to 41 years of age.

Most of the men in these classes had to register by June 15. There were fines and penalties announced for those who did not register. The men were interviewed. If married or discharged from the army they were not immediately called on to change jobs.

Single men who could physically take other jobs in essential classifications were sent to these jobs to interview the employer and if found satisfactory were assured of receiving fair minimum earnings for the class of work to which they were transferred. Transportation was provided by the government for those transferred to jobs away from their place of residence.

Other groups of non-essential industries are to be called on later in the year, the government working up from the bottom of the priority list. How many men are to be obtained for essential industries is not known, but the need for men is great with the Dominion at bedrock of the employable men and women.

—JAMES MONTAGNES

Commandos on the Production Front

(Continued from page 30)

fabrication. Then the expeditors started to move. They had orders typed and issued to the shop by 1:30 that afternoon. Each expeditor went to work in a different department. By 6 P.M., parts were rolling from the originating machines ready for tapping, drilling and reaming. By 9 P.M. they were ready for the heat-treating furnaces. At midnight, final assembly began.

A fast express was leaving Cleveland early in the morning for the desired destination. So the expeditors grabbed wrenches and helped assemble the hose. One expeditor had his car waiting. They caught the train, put the hose aboard, wired for someone to pick them up at the other end.

The job of an expeditor doesn't end even after planes, tanks and other war goods come off the production lines and go out to the fighting fronts. It's at this point that he may do some of his most telling work.

New windshield devised

SEVERAL months ago, one of Lockheed's pursuit plane models, used in hot, dry areas, developed cracks in its front windshield as the sun shone directly on it. When the news came to the factory, an expeditor—a trained engineer named E. C. Proutman—was put on the job. In practically no time at all, he had found the fault and devised the solution—to rebuild the curved, shatterproof glass in three sections.

Proutman didn't stop there. Cutting a wide swath through red tape, he went to work with the fabricating department, on his own initiative produced the new version and without more ado ordered replacement quantities into production. Only after the new windshields were on their way did he turn over his data to the regular engineering department where later, in the course of regular routine, the change was incorporated into standard design.

So effective have Lockheed expeditors proved that they have been given authority direct from the company president to order changes in methods, tooling, design or anything needed to break bottlenecks. Lockheed even has an overseas staff of expeditors who shoot trouble at the fighting fronts.

Expeditors are in use throughout virtually all industry today. Almost every company has at least one.

They're no glamour boys. Just as often as they're admired, so they may be cordially detested. For their jobs often require them to get into people's hair and pull. They care nothing about the screams as long as they get results.

"Commandos of American Industry" is a good name for them. They're tough, doing tough jobs, and getting results that are making it tough for the enemy.

Do you mean me, Uncle Sam?



YOU MEAN THAT I COULD DO MORE?

Yes, Uncle Sam, I guess you're right. Those of us who can stay at home far from the battle zone; who are spared the fate of a Colin Kelly, the anguish of a wounded soldier alone in a foxhole or the ordeal of a sailor adrift in mid-ocean—the least we can do for our part is to buy more and MORE War Bonds—not one or two to salve our conscience, but BOND after BOND.

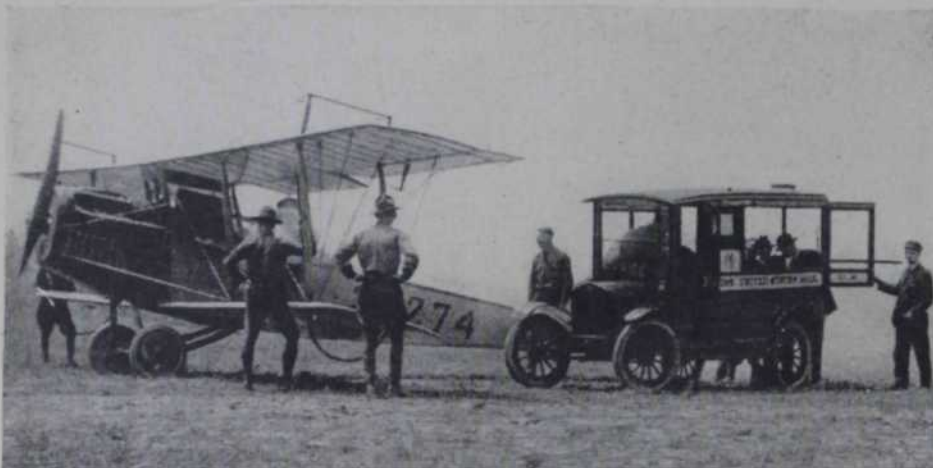
Thousands are paying for this war with their blood. It is easy for me to lend money.



NATION-WIDE RAIL-AIR SERVICE

Gold in the Clouds

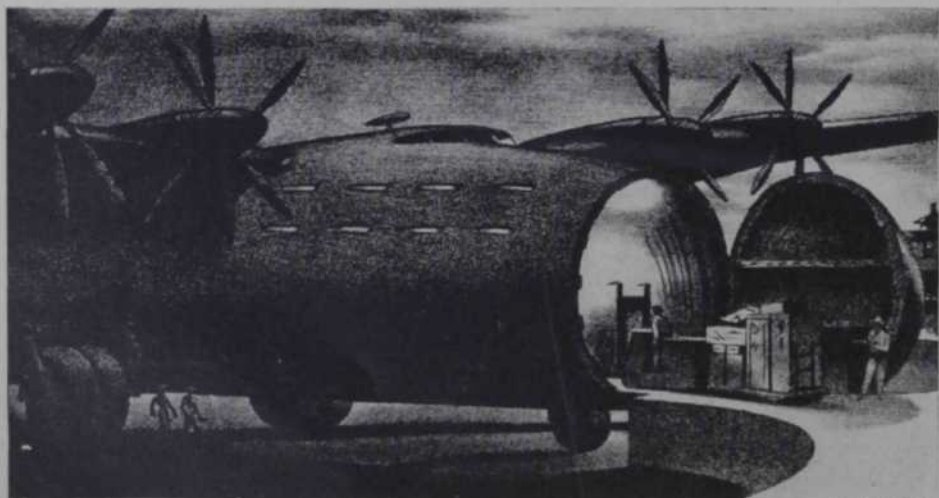
By A. H. SYPHER



The first air-mail flight took off from a polo field in Washington. Early air passengers rode with the mail sacks, risking lives at high prices



Modern domestic airlines cover 44,433 miles, protected by navigation aids, reach almost every large city, give passengers comfort and safety



Will postwar development mean giant planes on present routes or small planes operating on feeder lines? Opinions differ as eager men urge both

AMERICA is feeling the first symptoms of a fever of transportation development such as it knew in early railroad days—this time in the air

A NEW GOLD RUSH is sweeping America.

Modern '49ers are staking claims in the sky. They behold in the bright vision that drives them, not precious metal but commerce.

Vivid imagination alone has not created their vision. Pay dirt has been struck in that area before. Claims have been filed and proved sound. But war has broadened the air's aspects. It has brought promise that the air age soon will be here. It has fired the imagination that initiates action.

War has compressed decades of air progress into months. Costly development has become a critical need, justifying expenditures of millions where dollars were spent before. Accomplishment has become commonplace.

War has brought tremendous aircraft production facilities, developed new sources of materials, cut costs, taught millions to make air equipment and hundreds of thousands to use it.

More important, perhaps, is the impression war has made on the public air consciousness. The everyday, routine, globe-circling freight and passenger services operated by the Army, the Navy and the air lines have swept away commonly held notions of the air's limitations. They have opened vast new fields for commercial development. The rush to get into these fields, to take advantage of the facilities produced by war, is on.

America's established air lines, the pioneers who in prewar years carried on their domestic routes more passengers than were carried on all of Europe's air lines combined, look to world routes as their natural area of expansion.

They have demanded, almost un-



Strength through Strain

When your house is burning, you pour on all the water you can get. It is an emergency and you meet it with everything you have—all your energy and all your resources.

So it is with the railroads now.

Southern Pacific is carrying the biggest traffic load in its history. This traffic is war traffic—emergency traffic. It must be given emergency handling, which does not mean economical handling. Our first consideration is to keep the trains rolling.

Where additions to our plant and facilities would help us handle our emergency load quicker or more efficiently in our country's need, we have gone ahead and made the improvements, limited only by the shortage of manpower, materials and equipment.

Last year Southern Pacific spent \$53-, 945,408 for equipment, additions and improvements. We made these expenditures not through government subsidy, but with our own resources and our own credit.

These improvements have helped us materially to meet our great wartime responsibility.

In many cases this increased capacity

is far more than we would need for peacetime traffic.

But "first things come first," and of first importance is the goal of 100 per cent accomplishment for Uncle Sam.

While our main thought must be concentrated on the war effort, we, like everyone else, cannot help but cast an inquiring eye to the future... after the war is won. All industry will have great responsibilities then, too.

We feel sure that the human testing and strain we are going through now will give us all greater strength for successful performance after the war.

And the additions and improvements to our physical plant, strengthened now for war purposes, will increase our ability to give improved railroad service to our country in peacetime.

The more than thirteen thousand S. P. men now in the armed forces will return

to a stronger and more efficient railroad. So, while devoting all our energies to the wartime job, with confidence in victory we look forward to peace—and the opportunity then to play a vigorous and constructive part in an improved post-war economy.

A. T. MERCIER, *President*



The Southern Pacific system comprises 15,000 miles of line... serves more military and naval establishments than any other railroad.

S·P

The friendly Southern Pacific

Headquarters: 65 Market St., San Francisco, California

ONE OF AMERICA'S RAILROADS—ALL UNITED FOR VICTORY

4 Reasons

why you should install

IRON FIREMAN STOKERS Now

★ Ample Steam

Iron Fireman stokers fit requirements of each boiler plant. They keep steam at desired pressure, regardless of fluctuations in steam load. Steam output is increased so that stepped-up loads can often be carried without installing new boilers.



★ Conserve Fuel



Iron Fireman stokers embody these essentials: Accurate control of coal and air supply; electric operating controls; engineered installation. Owners profit by substantially reduced fuel bills, reduced labor and other operating savings.

★ Save Manpower 4 Ways

All Iron Fireman stokers do away with hand firing. Bunker feed models convey coal automatically from bin to boiler releasing boiler room employees for productive work. Cutting coal tonnage saves manpower of mines and railroads.



★ Reliability; Low Upkeep



Iron Fireman stokers are properly engineered and precision built. They are heavy duty equipment with years of trouble-free life. Correctly engineered installations insure dependable and reliable automatic firing equipment.

Our nationwide organization of qualified factory representatives is at your service. Write or wire Iron Fireman Manufacturing Company, 3451 West 106th Street, Cleveland 11, Ohio. Plants at Cleveland, Ohio; Portland, Oregon; Toronto, Canada.



IRON FIREMAN

Automatic Coal Stokers

animously, that world-wide competition in the air transport field be open, subject only to reasonable government supervision, and that private enterprise be allowed to develop commercial aviation.

Steamship lines foresee in air transport a fast, economical service that must become either a part of their own modernized systems, or a serious competition for passenger and express revenues.

So, despite a present government policy generally opposed to single ownership of competing forms, several steamer lines are staking claims for intercontinental air routes.

One surface line executive has explained his company's intentions by pointing out that, during its lifetime, the line has progressed from sail to steam, and intends to continue its progress into the air.

America's railroads, having seen the growth of truck and bus lines into national services that have cut deeply into rail income, have no intention of missing the boat on air transport.

The railroads' claim is that a transportation system should include all forms of transport—on rails, roads and airways. This, they contend, would result in integrated and therefore more efficient operations which would compete between systems rather than between forms.

But the truck and bus lines want air routes, too, and no doubt would resist being combined into transport groups.

Who will operate airlines

THESE conflicting interests will be governed by laws yet to be passed, and agreements yet to be made, which will determine who shall operate the nation's airlines and who shall fly the American flag on international routes. Congress has become air-minded along with the public, and has served notice that Capitol Hill must be consulted in the formation of government air policy.

"I know of no more important postwar problem, and none in which the United States has a greater postwar stake," Sen. Bennett Champ Clark of Missouri has declared.

Senator Clark is chairman of a nine-member subcommittee of the Senate Commerce Committee which has been quietly carrying on its own study of postwar air transport.

He has asked the President, the State Department and other government agencies to take no action on postwar aviation until Congress has had an opportunity to work out a policy.

When policies finally are determined, what may be expected in the way of domestic air service expansion?

Despite occasional charges that existing airlines have been slow to extend service, or that government policy has limited that growth, the record shows a history of vigorous expansion and keen competition for new territory.

Between 1935 and 1941, when war abruptly stopped expansion and caused curtailments in some instances, the 17

domestic airlines expanded their routes from 28,487 miles to 44,433—and this occurred during years when the Civil Aeronautics Board seldom received an application from anyone except existing airlines.

The 1941 service reached 270 cities, leaving only three of more than 100,000 population—Trenton, N. J., New Bedford and Worcester, Mass.—farther than 25 miles from a regular air line stop.

Civil Aeronautics Board studies show only 11 cities between 50,000 and 100,000 population, and only 51 cities between 25,000 and 50,000, which were more than 25 miles from a regular air line stop.

The impetus war will give air travel, plus the passenger trends over the past several years, indicates that traffic on the existing main lines will increase enormously as soon as equipment to handle it is available.

Wartime development also promises more efficient planes, with lower operating costs, which would give the air a more favorable rate position in relation to ground services than it now has.

This may mean either a great increase in the number of planes these lines will use—360 was their prewar peak—and a resulting increase in the frequency of service, or the introduction of much larger trunk line planes. A combination of both is likely.

But expansion of service beyond these trunks necessarily must mean service to the nation's smaller communities. This brings up an entirely new set of problems.

First, will these smaller communities support another form of transportation, or will air transportation supplant an existing form?

It may be assumed that new air routes in the less-populated areas will be subsidized by air mail contracts. Perhaps all first class mail will be air-borne.

But mail subsidies hardly can be expected to cover operating costs. The balance of these costs, plus any profits for the operators, must come from passenger and cargo revenue.

Unless the service is fairly frequent it is doubtful whether passenger and cargo revenue will be sufficient to attract, or to hold, privately financed operators. The business man who must wait all day for a plane is likely to find that he can reach his next destination more quickly by rail or bus.

After studying passenger, mail and cargo demands, L. Welch Pogue, chairman of the Civil Aeronautics Board, has concluded that service less frequent than two trips a day is of little value to the communities served.

Perhaps the solution to economical operations in many sparsely populated regions will be a service in which mail and cargo are picked up and dropped while the plane is in flight. Experiments in the carrying of passengers in gliders picked up and cut loose from planes in flight are being conducted.

All American Aviation, Inc., has been operating a mail and cargo pick-up service for four years. It serves 115 cities

an average of 17 miles apart in six eastern states.

Another possibility is in the development of a commercial-type helicopter. Faith in this development is demonstrated by a dozen applications on file with the Civil Aeronautics Board for authorization to operate postwar air routes using helicopters.

The second point raised by postwar local or feeder operations concerns public safety.

For years the Government has insisted that lines carrying passengers on regular air schedules use multi-engine airplanes. These would be costly to buy and costly to operate on local lines.

Civil Aeronautics Board engineers are studying safety minimums under which single engine craft might be approved for passenger service.

Safety factors

AMONG the factors involved are the frequency of emergency landing fields, air navigation aids and night flying equipment—because, to take advantage of air service, mail must travel at night to arrive at the start of the next business day—and mail is expected to pay the larger part of the operating cost.

Airplane manufacturers whose products in the past have given the United States the world's outstandingly efficient and economical air lines, are aware of these problems, are studying them and may offer the air carrier industry the plane most perfectly suited to the operations at hand.

Because of its vertical descent characteristic, the helicopter may answer the need. This possibility depends on production of a helicopter that will carry a sufficient payload to make commercial operation profitable.

Costs must be competitive with surface lines, both in original equipment and operation. Particularly on short trips, where the time-saving could not possibly be great, speed could not demand a large premium.

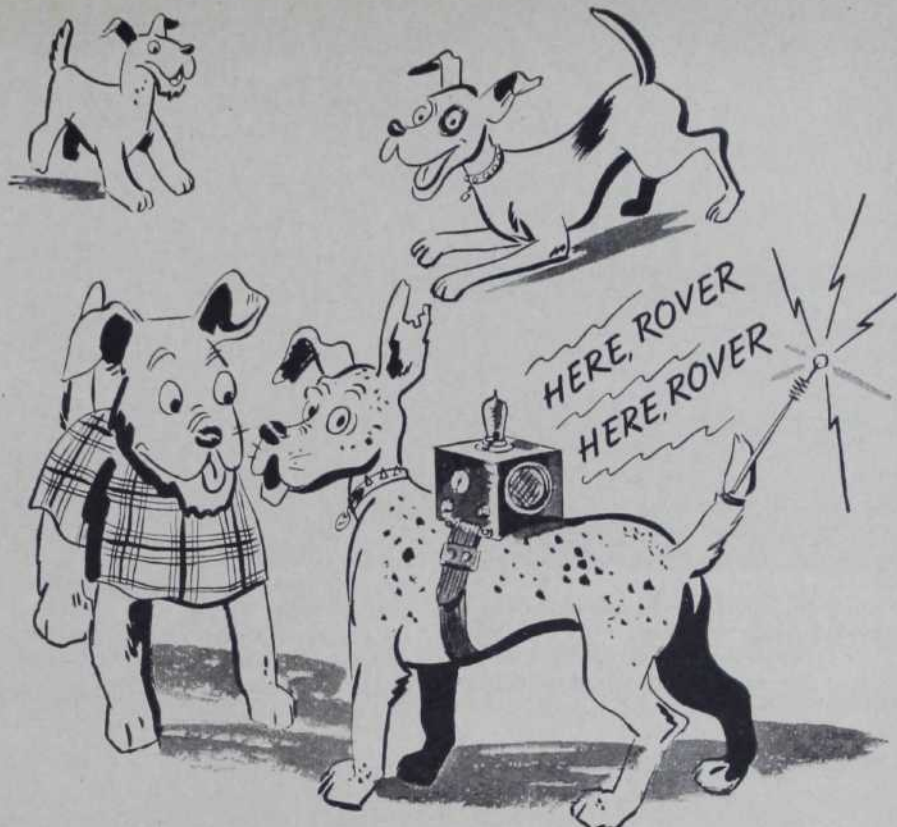
Still another problem to be solved is that of the public's need for additional service, and how far the Government will go toward paying mail subsidies for that need.

Certainly the lines now carrying mail, cargo and passengers, will resist the establishment of additional service under government subsidy unless that service may be proved to be a public advantage.

Those who demand a point-to-point service in areas where the public need will not support it may expect to pay for it on an individual basis. Aerial taxi service has been available at most principal cities for years, but its cost has prevented widespread use.

Operators of tomorrow's air lines face problems which will be solved, not immovable obstacles in the way of air progress.

At the war's end a huge airplane and equipment industry, a tremendous reservoir of war-trained air and ground personnel, and a ready public will be waiting the solutions.



*When you gotta go...
you gotta go!*

CALLING ROVER would be a cinch if you could equip him with a "walkie-talkie" set . . . and you might even teach him to reply, once he caught the spirit of the thing!

But, whatever its application after the war, the portable short-wave receiving-sending set will be electrically operated. And electrical circuits call for dependable connectors. Cannon Connectors will undoubtedly play an important role in all after-the-war electrically operated communication equipment because they are proving their merit today wherever dependability is of paramount importance.

This Cannon Connector becomes an integral part of a carburetor primer cap for aircraft engines. Cannon Plugs are used in thousands of different places on all types of American aircraft as well as on ships, guns, tanks and radios wherever good electrical connections must be assured.



CANNON ELECTRIC

Cannon Electric Development Co., Los Angeles 31, Calif.

Canadian Factory and Engineering Office: Cannon Electric Co., Ltd., Toronto

REPRESENTATIVES IN PRINCIPAL CITIES—CONSULT YOUR LOCAL TELEPHONE BOOK

This isn't Broadway and 42nd Street



Joe's the kid who lived next door. He'd be in college now if he didn't have this job to do—this job of rough-housing Japs and Nazis into kingdom come. And he'll be back . . .



He'll find that the American home-front has had to go forward on those enduring products that were made so well that they outlasted the war. Among them will be such Ohmer products as the Ohmer Taximeter—thousands of them still clicking it off for this vital transportation industry.

Ohmer's skill and production facilities are up to the hilt in the war. And they'll be there until it's over. Come Peace, however, we think that thousands of merchants, industrialists and transportation operators will remember how well Ohmer products served throughout the months of war. Their unfailing service *now* is proof of their efficiency, performance, and value. Ohmer Register Co., Dayton 1, O.

OHMER

CASH REGISTERS for every type of retail store
FARE REGISTERS and TAXIMETERS for transportation
TOOL CONTROL REGISTER SYSTEMS for industry

We Tour the HOME FRONT

Poor Fido! If he doesn't like dehydrated foods he's out of luck for the duration—all tinned dog food now goes to the Army's 40,000 dogs.

American teamwork which upset the Axis timetables is illustrated by General Motors Corporation which uses the services of 18,735 subcontractors and suppliers in turning out more than 2,000 items for the armed forces valued at more than \$10,000,000.

Carrying darkness is made possible by a new dark room outfit developed by Eastman Kodak Company, Rochester, for the use of men in the service.

Cu-Cum-Squa pickled, fried, stewed, baked or boiled may appear on menus. When matured, the vine of this recently developed vegetable covers about 400 square feet. One seed costs \$5.

Women exclusively are hired for production at the Northern Aircraft Products Division of Aviation Corporation at Toledo, and women are in the majority now at the Douglas Aircraft Company. In one plant they comprise 59 per cent of shop personnel.

Ninety-one young women will enter the engineering offices of Hamilton Standard Propeller Division of United Aircraft Corporation, East Hartford, Conn., upon completion of special scholarship courses at the Pennsylvania State College. Courses were arranged and financed by Hamilton Standard Division.

Products entirely unknown or not manufactured in commercial quantities in 1928 account for 46 per cent of the 1942 total sales volume of E. I. du Pont de Nemours and Co.

All the bang and recoil vibrations of anti-aircraft weapons without the use of expensive bullets and gunpowder are made possible by using compressed air and plastics in a machine gun developed by Edison General Electric Appliance Company, New York, for training soldiers at less cost.

One thousand industrial chimneys erected in 1942 sets the all-time high record, according to Rust Engineering Company, Pittsburgh. The proportion built in the South is greater than at any

other time, amounting to almost 50 per cent of the total. Average size of chimneys, however, was greater in the North.

Six miles of 24-inch pipe a day, or enough to load a train of 45 cars is the record set by War Emergency Pipelines, Inc., National Tube Company, Loraine, Ohio, a subsidiary of United States Steel Corporation.

Hitler's confidence of success when war started was partly based on Germany's production of aluminum which was four times that of France and twice the combined output of England and Canada. He wasn't figuring on America which, at the end of the war, will have an aluminum producing capacity of 15 pounds *per capita*.

Three months' vacation with full pay was recently granted their 50 salesmen by I. B. Kleinert Rubber Company, Inc., New York City. The reason—war work takes up a large portion of production and civilian merchandise is rationed.

The soybean whose strong flavor kept it from becoming a food favorite is now being cooked in a way that gives it a palatable taste while retaining its high food value.

Wood soles for women's shoes have been announced by E. P. Reed and Company, Rochester, New York. They will be available in the early fall.

12,000,000 automobiles and trucks will be needed in 1944 according to a survey made by United States Steel Company.

The Supplee-Willis-Jones Milk Co. is recruiting young people for a free training course in running soda fountains. Diplomas will be awarded. No penalty for sampling.

83 per cent fewer accidents in producing petroleum products for World War II than were sustained in World War I is the record of employees of the Standard Oil Co. of Indiana.

A \$75,000,000 present and postwar public improvement program including 16 slum clearance projects and six-lane highways at the city's gateways is being planned by the officials of Memphis and Shelby county, Tenn.



NOTE TO HOME OWNERS

This means something to you, too. It foretells the day—not now, but after Victory—when you will have efficient fluorescent lighting in your own home.

The fluorescent fixture of the future



The new Sylvania industrial fluorescent fixture is much more than a design to save critical metal for armament.

Right now it is standardizing fluorescent lighting for precision production and is giving better cool, shadowless and glare-free light to war plants.

In its simplicity and flexibility of design, it is truly the fluorescent fixture of the future.

It takes its place on the list of Sylvania fluorescent "firsts" with the first complete industrial fixture, which did

much to speed war production with the most efficient lighting known.

Sylvania engineers, who have contributed so much to the development of fluorescent lighting, streamlined this fixture and eliminated metal entirely from its reflector. Yet its durable composition reflector has an efficiency of 86 per cent, reflecting

more light than prewar porcelain enameled metal in conventional contours.

This all-purpose Sylvania fluorescent fixture is designed to meet any industrial requirement in one of two standard sizes. It carries Underwriters' Laboratories approval and our own guarantee.

... SYLVANIA ELECTRIC PRODUCTS INC.

EXECUTIVE OFFICES: 500 FIFTH AVENUE, NEW YORK 18, N. Y.

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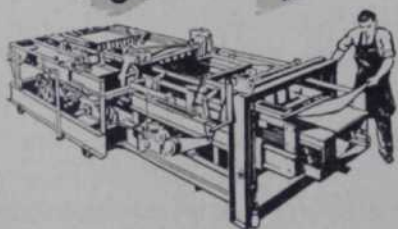
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The Public Debt Is a Real Debt

(Continued from page 26)

the fixed capital embedded in planes, shipyards and docks, in naval bases and vessels, or in military roads and fortifications yield tax revenues. Moreover, they cannot carry their own operating costs or provide for their own replacement. They simply represent charges against the rest of the economic system. In addition to their original costs, they will entail large annual charges for continued upkeep.

Spending ends in debt

THAT public expenditures for war do not generate enough increase in income to bring the budget more nearly into balance is readily apparent. When the Government spends \$20,000,000,000 for war, the \$20,000,000,000 of national income thus generated is only in small part available as revenue to the Treasury. If, say, 20 per cent of the increased income be collected in taxes, the Government would receive back as a result of this operation only \$4,000,000,000, with a resulting increase of \$16,000,000,000 in the public debt. This is what has been happening since 1940. This is what will continue to happen with non-revenue-producing government outlays.

By way of contrast, it is well to note what happens when national income increases as a result of private business expansion. Then the ensuing increase in tax receipts is clear gain for the Treasury. Instead of an increasing deficit we get, inevitably, a decreasing deficit.

It must also be noted that an ever-expanding public debt would adversely affect the level of national income in the future by checking investment. The accompanying increase in taxes and the fears of more to come could hardly fail to deter new investment. Hence the rate of capital expansion and the rise in national income would be retarded.

The implications of the new philosophy of public debt from the point of view of taxation are engaging. If the growth of the public debt is of no moment, one might, at first thought, be inclined to ask—"Why go to all the trouble and expense of collecting taxes? Why burden the public with ever-increasing levies? Indeed, if the purpose of fiscal policy is not to balance the budget but to obtain the largest possible 'net income-creating' expenditures—as measured by the cash deficit—why not promote the desired end by cancelling all taxes?"

That a reorientation of thought with respect to tax policy would be necessary is suggested in the statement appearing in *Fortune*:

Once freed from the obsolete concept of the balanced budget, the larger uses of federal taxes can be creatively explored.

The suggested creative purposes are:

- (1) To regulate the distribution of income.
- (2) To prevent inflation in periods of full employment.

Heretofore, the use of the tax machinery to redistribute income has been combined with the purpose of raising large amounts of revenue. Hence we have had extremely high taxes on the well-to-do, and substantial taxes (direct and indirect) on the lower income groups. But, if the sole purpose of taxation should be to redistribute income, this could be accomplished equally well by abolishing all taxes on the masses, retaining only those on the high income groups.

Indeed, even the taxes on the higher incomes might be eliminated by the use of more direct methods of leveling incomes, such as the regulation of profits and salaries. Thus, to realize the first objective, the volume of taxes might well be negligible.

The second objective, the prevention of inflation in periods of full employment, might also, *theoretically*, be achieved without taxation. As ordinarily stated, the problem at such times is to mop up excess purchasing power. This can be done *either* by taxation *or* by the sale of government bonds to the investing public rather than to the banks. In both cases the funds obtained would come from individual incomes, thus reducing the amounts available for consumption expenditures. If, therefore, we were not concerned with the size of the government deficit, we could eliminate the tax method of absorbing purchasing power.

As a practical matter, it would, however, still doubtless be found advantageous to use some taxation. But, if the new philosophy were sound we could have a great easing of the tax burden. All that would be required would be a properly graduated income tax, supplemented, perhaps, by estate taxes.

Debt and inflation

ALTHOUGH history shows that an enormous rise in the public debt always results in disastrous inflation, advocates of the new philosophy assure us that inflation can readily be controlled, even though the debt is constantly expanding.

Fiscal management under the new system of public finance, it should be noted, would involve control at two stages:

First, whenever we are *not* making full use of our productive resources the Treasury would stimulate further expansion through borrowings from the banks. If the banks should at any time be unwilling to buy all the government securities offered, the Government might possibly try to meet the situation by taking over the banks. As an alternative, the Treasury might turn directly to the Federal Reserve system, which is now under political control, or to the Treasury to issue its own non-interest-bearing notes.

The second stage is reached when the expansion process has resulted in full use of our productive resources. To check inflation at this point, it is held that the Treasury would henceforth

cease to borrow from the banks, and raise the money required solely from taxes or from bonds sold to the public. Since the Government's revenues would no longer be derived in part from bank credit expansion, the total money supply would no longer increase; and inflation could not occur. Stated in theoretical terms, the problem sounds simple. But the practical difficulties involved cannot be surmounted without an elaborate system of control.

The problem of control

THE NATURE of the inflation control problem thus raised is shown by our situation today. We are now operating the bulk of our productive resources at maximum capacity; we not only have full employment but a shortage of manpower. We have, moreover, a huge excess of purchasing power.

Control over prices in this situation is being sought by two methods. On the one hand, we are attempting to drain off the excess purchasing power by taxes and bond sales to the public; on the other, we are trying to prevent increases in wage rates and in farm prices.

The control of wage rates and agricultural prices involves political as well as economic factors. Group pressures led to substantial increases in wages and farm prices long before full employment was reached; and the OPA could not prevent a considerable advance in the prices of manufactured products.

When full employment came, the problem of control was gravely complicated because of the uneven operation of the so-called "vicious spiral," which inevitably resulted in continuing demands from certain groups for further increases in prices and wages.

On the demand side, the control of excess purchasing power presents quite as great difficulties. When full employment is reached, is the Treasury in a position to rely exclusively upon taxes and bond sales to the public? Despite restrictions upon consumption and the patriotic urge to support the Government's financial program, the Treasury deems it impossible at present to raise all the funds required by taxes and bond sales to individuals. As a practical matter it is recognized that the banks must meet at least a third of the financial needs. Compulsory pay roll withholding taxes might conceivably absorb all the excess purchasing power currently accruing to wage and salary groups; but such a tax cannot be collected on a current basis from farmers and various professional groups.

Every country at war has come to realize that prices cannot be controlled through fiscal policy alone. Direct control over costs, supplemented by rationing, has been found indispensable. Moreover, increases in costs are directly related to the expansion of purchasing power. In the United States, for example, the excess purchasing power existing in 1942 could not have been controlled without adequate control over wage rates and farm prices.

The experience of other countries has



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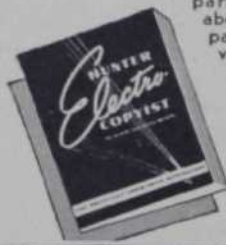
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shown that an inflationary cycle cannot be prevented without controls over primary cost factors. It has also been demonstrated that, given such controls and an *effective rationing system*, the rise in commodity prices can be checked even when the fiscal program is not adequate. Canada and England, as well as Germany, kept prices well in hand in 1942, even though all the excess purchasing power was not currently absorbed.

In time of peace the control of inflation at the stage of full employment would be even more difficult. The pressures emanating from special groups would be quite as insistent and the necessities of a national emergency could not be invoked as a restraining influence. The sale of bonds to the public would be more difficult because opportunities for investment elsewhere would be more abundant. Moreover, at the very time the Treasury was seeking to check inflation, the situation might be complicated by heavy public liquidations of bond holdings. The Treasury may face this problem in the postwar period.

If one were to assume that, as full employment is reached, the budget would be virtually in balance, the problem of control through fiscal policy would seem to present less difficulty. But, the very process of creating employment by means of deficit financing inevitably results in a perpetual shortage of tax collections as compared with government expenditures. The budget thus cannot approach a balance. Moreover, the new

philosophy holds that, even in periods of prosperity, the deficit must not be reduced—because this would mean a decrease in the Treasury's "net income-creating" expenditures, with resulting deflation.

The moral is that, if we are willing to apply totalitarian methods of control, inflation might be largely held in check, even with a constant increase of the public debt. We should have to control wages and farm incomes; we should have to regulate corporate earnings; we should have to control investment; we should have to ration commodities; we should have to control rents; we should have to license foreign trade; we should have to supervise, and possibly close, the security and commodity markets.

The principal advocates of the new philosophy of public debt have, however, expressed themselves as opposed to regimentation, and as strongly in favor of the system of free enterprise:

We do not want the Government to run the whole show. We do not want a totalitarian state. We want freedom of enterprise. . . .

We shall have in our hands the tools by which we can create a greater measure of economic justice, without sacrificing any of the essential freedoms.

It will be necessary to make a choice. With unlimited debt expansion we cannot prevent inflation without the use of totalitarian methods of control. No compromise or half-way measures can adjust the difficulties. The choice is between regimentation and inflation.

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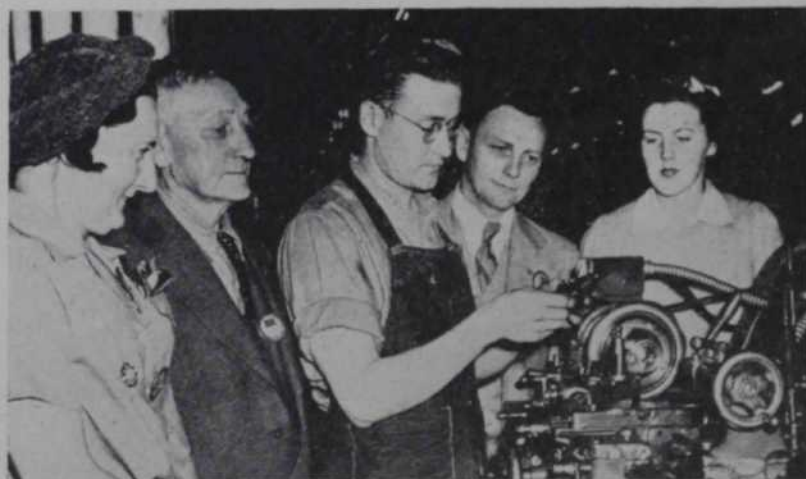
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These members of the Endres family of Seattle, Washington—Rose, Michael, Charles, Tom and Helen—all work at the Boeing Aircraft Company, home of the Flying Fortress. Through three generations, they have served an aggregate of 70 years. Michael, the grandfather, aged 70, has been with Boeing 19 years and is still going strong.

History . . .



HITLER had a head start on arms production and thought we'd never catch up with him, but he didn't know Americans

"AHA," said Hitler, "but America has no armament industry." He was right at the time he said it but not right enough. He had not read the right kind of history. He did not know that American manufacturers have been ingenious ever since 1776 when Roger Miller, a Massachusetts baker, converted his bread oven into furnaces in which he melted scrap metal for cannon balls, bayonets, swords and musket barrels.

In New York City, Wilber Marksman, carriage maker for the exclusive trade, turned caisson maker and, when the British occupied New York in September 1776, he fled to New Jersey where he carried on.

Jack Forrest of Maryland was a cabinet maker specializing in fine tables. With the Revolution, he turned his genius to making rifle stocks.

In 1812, Martin Brooks, a simple Maine handyman with no education or particular talents, perfected an assembly-line scheme which upped by several hundred per cent the production of much needed ammunition cases.

At the same time, Josh Rymer, who couldn't get into the army because of a twisted shooting arm, twisted his delivery business into an ambulance unit and provided the Army with seven closed wagons, expert drivers, suitable horses and himself as manager.

Another Jacksonian, Heather Plunker, converted his buckle factory into a cartridge factory; and Martin Walsh of New Hampshire, who had been building sailing yachts for the rich, found he could build speedy patrol vessels capable of mounting small cannon.

The Civil War found Virginia's Isaac Lewis making pistols for the Confederacy with machinery that had once made music boxes; and Clark Ebens of Mississippi building cannon instead of iron money chests.

On the Union side, Ellery Rhodes of New York, who had been making plows, manufactured steel plating for the new ironclads. Horace Enderson of Syracuse, gave up the manufacture of desks in favor of supply wagons.

True, Hitler, we had no armament industry two years ago. We had, instead, ingenuity and an American tradition.

—SIMPSON M. RITTER

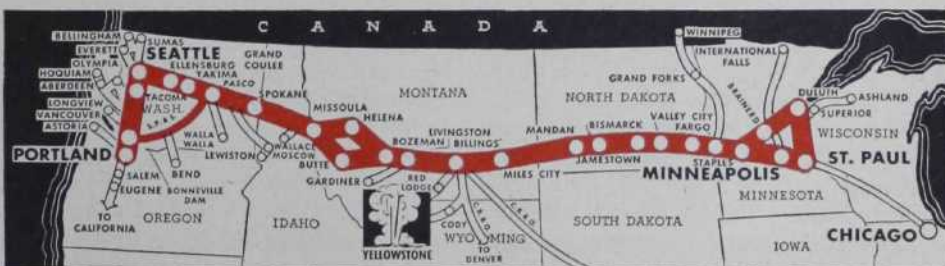
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as 54 billion beans roll to war . . .



over the Main Street of the Northwest!

The legions of Caesar, the hosts of Hannibal, like every army before and since, often marched on beans. Today these "veterans" are fighting again . . . helping supply valuable protein and food energy to our armed forces, civilians and allies.

Among the world's favorites are the plump, tender beans grown in the Northwest, in Washington, Oregon, Idaho, Montana and Minnesota. From these

states, Northern Pacific Railway last year helped move over 30,000,000 pounds . . . 54 billion beans.

Again this year, as meat-rationing continues, and as war demands for beans increase, this plentiful meat-substitute will be even more conspicuous in the parade of vital war supplies moving along the tracks of the Northern Pacific — Main Street of the Northwest!



MAIN STREET OF THE NORTHWEST

AIRPORTS in Sicily, pipelines in Alaska or Nazis anywhere—the Army's least-known Corps licks them all



The Engineers Can Do It

By HERBERT COREY

HE GAVE the bulldozer more juice. The thing roared like a foundry. Bulldozers are built for power, not speed. They can rip up trees or chew through swamps but they are not "handy." Robert Parker hauled at the controls as though he were playing a gargantuan harp. He backed her and wheeled her, let down the cutting bar and turned on the gas. A rolling wave of earth rose in front of the bulldozer. It buried the flames which were hurrying toward the ammunition dump from the bombed gasoline cans.

Robert Parker backed her and turned her. He let down the blade again and more dirt heaped on other little flames that were bouncing ahead toward the racks of shells. The General told of Robert Parker's exploit in a strictly non-sensational, engineering way:

"Parker did a very good job," said the General.

He did not further identify Parker.

He may be a private first class or a specialist or an honor man from West Point. The General did not stress the fact that Parker's roughing around with the bulldozer saved several million dollars' worth of shells, or that it takes considerable nerve to race gasoline flames toward an ammunition dump in a bulldozer.

He was professionally interested mostly in how Robert Parker did it. Now, if it had been that engineer scout in the Papuan jungle—. Even the Engineers give him the nod:

Overboard in a swamp

"WE," said the Army, "have got to have an airfield back in the middle of that jungle. And damn quick."

There was no road and the job of cutting one through the tangle would have cost weeks. The Engineers put an Engineer on board a plane along with surveying instruments, emer-

gency rations, anti-snake venom and a Tommy gun. He made an aerial survey of the jungle. Then he went overboard in a parachute to land in the middle of a swamp. He surveyed the mire, found the place he wanted, put up some kind of a marker and then wallowed back to headquarters.

The Engineers put baby bulldozers and sheepsfoot rollers—which are steel drums in which spikes are set—and rooters and rotary tillers on planes and dropped them on parachutes to the selected ground where parachuted men were already at work. Before the Japs knew anything about it, an airfield had been paved with steel-mesh mats anchored so they could not sink in the mud and our gunners were skeet-shooting Zeros out of the air.

The Engineers are mildly proud of that job and the way they handled that airfield perplexity at Bone in Tunisia, too. For ten or 12 years, the

PEERLESS PUMPS

raised them!



OFFICIAL U. S. NAVY PHOTOGRAPH

...FLOATED FROM THE BOTTOM OF PEARL HARBOR
WITH PEERLESS PUMPS.....

... Sneak attack ... stab in the back ...

exploding bombs, boiling oil, twisting columns of black smoke

... havoc in Pearl Harbor! Even before flames were quenched, word went out:

"REFLOAT! REPAIR! SALVAGE!" To America came hurried call for 30 Peerless

Pumps, spectacular giants, capable of dewatering sunken holds and cofferdams at

the torrential rate of 100,000 or more gallons per minute ... Peerless employees

worked like beavers, day and night, to build the pumps for this amazing salvage job. Ordinarily a 30-day order, Peerless assembled and delivered the pumps in the incredible time of only 36 hours.

Ships rushed the pumps to Pearl Harbor. Under glare of sun and searchlight,

these Peerless Pumps worked continuously ...

and now, all battleships but one are floated,

and their wounds are being repaired. Phoenix-like,

out of the inferno of Pearl Harbor the fighting ships are

going back into action to blast the Japs!



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★ The 32,600-ton battleship, U.S.S. California, is shown being towed to dry dock at Pearl Harbor. It was raised from the ocean floor by means of cofferdams ... steel sections driven into the mud and turned into "dry docks" by giant Peerless Dewatering Pumps.

French had been trying to make a landing place out of the only available flatland. The trouble was that the flatland was a swamp.

The Engineers put their enormous machines at work, hauled sand and rocks from the desert and dumped them on the mud. The airfield was in complete working order in two weeks, complete with gasoline dumps, machine shops, barracks and anti-aircraft batteries.

When the Army reached Sicily, the Engineers were asked to fix up an airfield in a strategic position, in the usual quivering hurry. They picked a level wheat field, sliced down the wheat—perhaps with one of the new grasscutters which cuts a swath 21 feet wide at a speed up to 20 miles and can mow 40 acres an hour—and sent word to the Army to come and get it. Elapsed time 24 hours. Four days was par for airfields in Tunisia.

No wait for airfields

"THE Engineers built the fields faster than we could occupy them," said Lieut. Gen. Carl Spaatz, commander of the North African Air Forces.

Airfields come smaller and more numerous in the Zone of Operations

nowadays to hamper enemy efforts. When an ex-enemy field is taken over, the Engineers scout it for mines and booby traps. That is a part of an Engineer's business, in addition to building roads, docks, bridges, levees, controlling floods and doing other chores.

If a little spell of fighting comes along they take it as part of the day's work because they are trained in all the kinds of fighting there are. Even in commando tactics. A man must be tough to be a commando, and the Engineers are tough.

One recent story is of an Engineer on Attu who had been irritated by the comments of soldiers riding like gentlemen in a truck. He picked 'em out of that truck, a man at a time, licked each one and threw him back in. The story came to light because he caught a hiding Jap. Discovering that the Jap was unarmed, he threw down his rifle, tossed the Jap his bayonet, drew his knife and motioned the Jap to come out and fight. The Jap was so appalled at the offer that he ran away. That gave the Engineer a legitimate excuse to shoot him.

There is another tale of a company of Engineers who were waylaid by Japs as they landed on a Papuan shore. The Engineers laid down their

tools, plucked their rifles from their shoulders and went into action. The Japs hid behind trees. The amused Engineers, knowing that their .50 calibre bullets would go through trees like a spoon through pudding, blasted the Japs until they ran. Score, 120 dead Japs, one dead Engineer, the company cook. He had been hampered by the obligation to carry his stove to a safe place before he settled down to fighting.

The Engineers are the foundation on which the fighting elements of the Army immediately rest. Engineer officers and troops are mingled with the combat soldiers. They supply that highly specialized and sharp-edged knowledge the fighting men need. An Engineer won the siege at Yorktown. General Gates cornered Burgoyne at Saratoga and forced his surrender largely through the skill of an Engineer. Lord Howe did not attack at Valley Forge because of the defenses skilfully constructed by the Engineers.

In the First War a private of Engineers was quoted:

"We got the easiest job in this army. All we gotta do is to make the roads and build the bridges and cut the barb wire and then take the infantry by the hand and show 'em where to go."

In peace the Engineers Corps conducts very big business indeed. It is better known to the rest of us—and, paradoxically, less well known—than all the other elements of the Army put together. We used to hear a battery of field pieces rumble along behind horses that shone like glass in the sun and our backbones tingled. Crowds lined the streets when the infantry marched and our pre-war cavalry made us feel like super-Don Quixotes.

Engineers don't parade

THE Engineers did not go in for parades. They were out working. The 1941 report of the Chief of Engineers, issued just before Pearl Harbor, stated that during the fiscal year the sizable sum of \$1,015,794,516 had been made available for the Engineers Corps' operations. This expenditure provided approximately 341,461,000 man-hours of direct employment as well as a considerable amount of indirect employment.

"New work was completed on 40 river, harbor and flood control projects, materially advanced on 249 other projects, and maintenance operations were in progress on 364 such projects."

In more than a century, the Engineers had built up a public confidence in their impartiality, honesty and



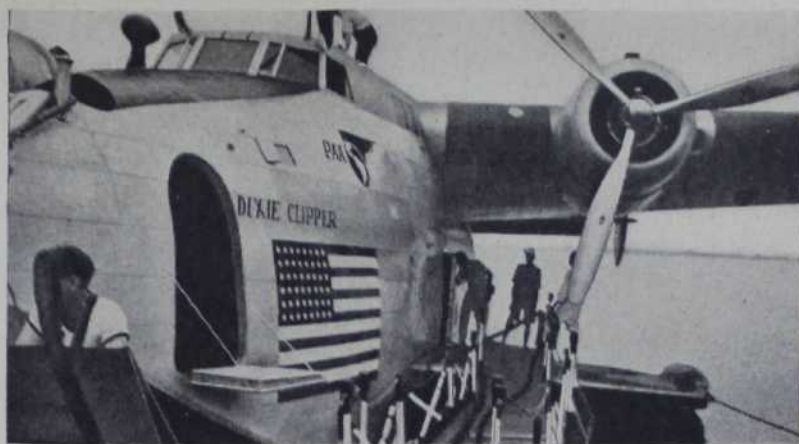
U. S. ARMY SIGNAL CORPS

"All we gotta do is make the roads and build the bridges, then take the infantry by the hands and show them where to go"

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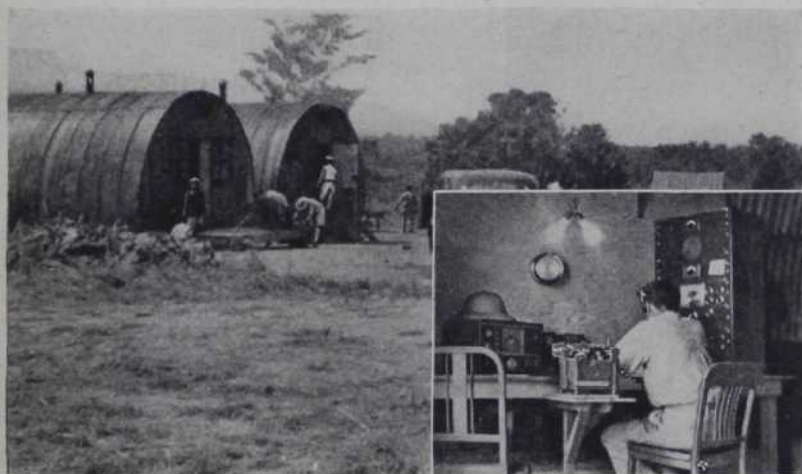
—From Remote African Base Pan American World Airways reports Hardihood of Underwood Equipment



1. Secret Airport—In the African wilds a Pan American World Airways plane floats at its dock. Before the war, Pan American foresight blazed many air trails now vital to the United Nations' war effort. Among the machines that contribute to Pan American's efficient operation are those which help organize its thousands of essential details—office machines! In Pan American's accounting, traffic, clerical and executive offices, there you'll find the name Underwood Elliott Fisher.

2. No Casualties Permitted—Unlike the 407 U. S. cities where service facilities on UEF machines are, even in wartime, as near as your telephone, such remote outposts as this airport must rely completely on the unfailing durability of its office machines. Here, Pan American installed Underwood typewriters. Many of these machines are veterans in service, yet Pan American reports that all are on top of their jobs—that working without vacations, they have required remarkably little special attention.

3. Service in War—Air crossroads of the world today is neutral Lisbon, Portugal. Here top priority passengers are shown leaving a Pan American Clipper after a 4-continent, on schedule, flight. Also serving you in wartime UEF can supply adding and accounting machines under WPB regulations. We have been able to assist many companies with their wartime accounting problems. Ribbons, carbon papers, and complete maintenance service on all products are available from coast to coast.



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Enlist Your Dollars... Buy War Bonds... To
Shorten the Duration

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"This Man's Army Treats You Right!"



IN the field or in camp, American fighting men are provided with every safeguard for healthful living conditions — thanks to the foresight of our military medical authorities.

The Mobile Disinfector and Bath Unit, designed and built by Cleaver-Brooks, rids clothing, mattresses, blankets of vermin and, in emergencies, serves as a surgical steam sterilizer. It is also used as a portable shower-bath unit, drawing water from a nearby stream or other source and heating it to a comfortable temperature to provide showers for six to twelve men at a time.

This unit is one of several types of oil-fired, portable heating equipment, built by Cleaver-Brooks, in use by our armed forces in the field for disinfecting, water-distilling, sterilizing, bathing and

other important hygienic needs. The engineering and manufacturing skill gained in the building of oil-fired steam generators and portable bituminous heating equipment made it possible for the Cleaver-Brooks Company to provide these perfected, highly efficient units for our military services in the "record" time needed.



Clothing and bedding are placed in the disinfecting chamber and subjected to 250° temperatures plus live steam for effective decontamination and vermin destruction.

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Steam Generators



Food Dehydrators



Tank Car Heaters



Oil & Asphalt Heaters



Special Military Equipment

freedom from political control which, to be frank, is unmatched in our democracy. Whenever some political subdivision, hungry for federal gravy, thought up a plan to line a creek bed with concrete, it was the custom for Congress to call in the Engineers for a survey. The Engineers paid no attention to the politics. Only to the engineering.

In 1937 an effort was made to take this high-grade service away from Congress and submerge it in the labyrinth of executive services. It failed. The Engineers continued to be the "most valuable professional auxiliary that Congress ever had" as Gen. Hugh S. Johnson once wrote.

The Engineers surveyed the routes on which the transcontinental railroads were built, dug the Panama Canal, improved our harbors and inland waterways, harnessed the rivers, created the Great Lakes navigation system, handled the flood-control measures in the Mississippi Valley, and made Hell Gate navigable. The list might be extended indefinitely.

Rebuilt entire ports

DURING the First War the Engineers did things in France that stagger the imagination even today. Entire ports had to be built or rehabilitated, entire systems of railroads and highways modernized, great depots set up, and sawmills, quarries and factories operated. The A.E.F. went ashore at facilities created by the Engineers; its cargoes were stored in Engineer-built warehouses, and the first troops on land sheltered in Engineer-built barracks. Procurement was in a deplorable state in France in these early days of the First War, and the Engineers took over the purchase of things needed from the neutral countries.

In 1941, the Engineers provided a chain of airfields to facilitate the delivery of planes to Australia and the South Pacific islands. They worked almost 24 hours a day and seven days a week in building the 1,700-mile-long Alcan Highway over which our troops in Alaska can be provisioned no matter what happens on the seas. That epic story has been told and retold, but one incident must not be forgotten. Two corporals, husky as Engineers should be, hopped into a mountain stream to bathe at the end of their sweaty day. The mountain stream ran pure ice water. The corporals splashed about happily. Suddenly one corporal yelled, "Lookut!"

The other corporal looked-ut right into the eyes of a bear. Whether the animal was attracted by the prospect of white meat or companionship will never be known. The first corporal scrambled up the bank. The second corporal dived and brought up a rock:

"Help," howled the bear, according to the sworn statement of the first corporal. "When that rock hit him on the nose he like to fainted. I could hear him hollering to himself as he tore through the brush."

The corporals continued their bath.

When you see a turreted castle on a

soldier's badge take another look. The guy's good or he wouldn't be in the Engineers. In the Corps' history are the names of Douglas MacArthur, Robert E. Lee, Joseph G. Totten, George B. McClellan, Henry W. Halleck, George G. Meade, P. G. T. Beauregard, John Pope, John C. Fremont, Joseph E. Johnston. The list of good names is as long as a politician's speech but these will probably be recognized.

During this time of war it has been necessary to select qualified men from civilian life but, in normal years, the officers of the Engineers are taken from the high-ranking graduates of West Point. West Point was a school for Engineers before it became the Military Academy and it still has a distinctly engineering flavor. It was established in 1802 but the Corps was created in 1775, which makes it the oldest continuously existing branch in the Regular Army.

"Coldly and objectively," says a Corps' publication, "the conclusion is that a gap running from the end of the Revolution until 1794 exists in the Corps' life span—"

A minority objection might be made, because Engineers were at work during this period building fortifications under temporary contract. They had been, but no longer were, of the Corps. Congress had had one of its accustomed lapses into economy and had mustered out the Engineers. Later a Corps of "artillerists and engineers" was set up and, in 1802, a separate Corps of Engineers was established.

The Engineers had one advantage. They were so greatly needed in a young country that was fairly popping out of its seams that they kept in practice. The war of 1812, the war with Mexico, the Civil War, the war with Spain and the First World War were so spaced that the military tradition was kept alive, while professional proficiency was attained by peacetime employment.

"Without the loan of these trained engineers, the building of the western railroads might have been delayed another half century."

Set and ready to go

IN 1869 a School of Application was established on Long Island, which has grown into the present Engineer School at Fort Belvoir, on the Potomac below Washington. Congress realized the usefulness of the Corps and has maintained it at a practical strength during the past century. It was set and ready to go when it became evident that we would play our part in the Second World War.

The Engineers passed a miracle. There were only 300,000 men in the Army at that time. An Army which might touch 10,000,000 or 11,000,000 men was in prospect. Everything must be done to get ready for it. They bought 8,000,000 acres of land almost overnight—built troop-cities, sewerage, electric-lighted, criss-crossed with roads, provided with clean water.

The selectees were decanted from their homes into reception centers and moved on to replacement centers where



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aerial show on earth. In astronomical numbers its daring performers move on across oceans, seas, islands, and continents to give final performances in Rome, in Berlin and in Tokyo.

How a show so great can be so mobile is an absorbing story in itself. Some of it can now be told. Combat hangars for instance... how can they keep up with a battle front that jumps an ocean or a sea over-night?

That very problem was put to Butler engineers and skilled craftsmen while they were running a 3-shift production line on steel mats which hook together and in a few hours make an airfield runway; while they were up to their ears in the production of a complete array of portable steel buildings for airports and gasoline tanks for refueling warplanes and mechanized units.

In time to make a certain convoy, they came up with the right answer. It is the



Butler Combat Hangar so simply engineered that ninety inexperienced soldiers can erect a 130x160 foot unit in 18

hours on sand or ice or uneven terrain. The parts that form its columnless, hinged arch, steel frame, bundle so compactly they are loaded into air transports and flown in. On a system of pulleys and ropes its flame-proofed, bomb-resilient canvas envelope is raised and suspended under the steel-frame. Over the framework camouflage or an outer wall of steel or wood may be attached for greater protection and comfort.



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wrote Robert P. Patterson, Under-Secretary of War, in his letter to the men and women of McCormick & Co.

Congratulations to our 105 faithful men and women now serving in the Armed Forces and to our 800 loyal employees who have won the coveted Army-Navy "E" Award. To our wholesalers, retailers and other food outlet customers — and the millions of civilian consumers of our products, we wish to extend our warm appreciation and thanks for their unselfish cooperation and assistance.

Multiple Management*, under which we have operated for the past 11 years, has taught us that cheerfulness, unselfishness, friendship and honesty are the keys to greater production. So, when our Armed Forces asked us for tremendous quantities of our McCormick Spices, Teas, Extracts, Mustards, Mayonnaise, Bee Brand Insect Powder and Spray — and many other war items — all of us swung into a production stride that earned our citation — "For your fine achievement in the production of materials needed by our Armed Forces."

We pledge that the record which won this award was made only to be broken.

***MULTIPLE MANAGEMENT**

All of the affairs of McCormick & Company are directed by 4 boards — the Senior Board, the Junior Board, the Factory Board and the Sales Board. They investigate, develop and control every phase of our business from production to sales.

MCCORMICK & COMPANY, INC. • BALTIMORE, MD.

they were given preliminary training. Field ranges and airfields were provided on which they learned to march and shoot and fly. General hospitals were created—and munitions factories and housing projects.

All this was just a starter.

Maj. Gen. Eugene Reybold is Chief of Engineers. As he has often repeated, "This is a war of engineers. It is on a hitherto undreamed of scale in which machinery is used in a way never before possible. The Engineers developed the bases along the Atlantic coastline leased to us in the 50-destroyer deal, and provided port facilities and thousands of miles of highways and waterways for the most extraordinary job of transportation ever performed by any people."

Pearl Harbor had been hit hard. Eight months ago convoys to the Middle East must round the Cape of Good Hope. The needs of Australia called for the longest supply line in history. It was almost a suicide mission to get goods to Russia through the sealanes around Nazi-held Norway.

"But the fact remains," continued Maj. Gen. Reybold, "that engineer equipment, moving over engineered transportation, bringing goods from plants built by Engineers, began to trickle and then to flow to the United Kingdom, to the Middle East, to Australia, to Alaska, to Hawaii and to Russia. The first meager trickle brought the equipment and supplies with which bases in these overseas theaters were built, supplied and expanded."

The Japanese thought Dutch Harbor was protected only by some anti-aircraft guns and a few flying boats. Warships, carriers and transports sneaked up under cover of fog to reduce our most important Aleutian base. They did not know that only four days before the Engineers had completed an airfield on Umnak Island, 60 miles west of Dutch Harbor.

"They got the surprise of their yellow lives," said General Reybold. "Our Warhawks and Marauders had scarcely arrived at Umnak when they took off to counter that Jap assault. To avoid bombing and strafing, the Jap warships and carriers ducked back under their protective covering of clouds. Few of those Jap planes found their carriers again."

"Sheer guts and hard work"

A SERIES of stories might be written of the work of the Engineers in Alaska. On Adak Island they dammed a creek, and into the lagoon thus formed they "dozed" a heavy fill and covered it with landing mats. In North Africa, they had 127 airdromes at work in six months.

The Airborne Engineer Battalions are equipped with lightweight machines for transportation by air. Engineers dropped by parachute are prepared to demolish enemy communications, wreck airfields, factories, docks, utilities, supplies and equipment. They do whatever hasty repairs are needed to existing airfields so that other airborne elements

may come in to finish the job. They cleaned up the ports of Casablanca and Oran and the other harbors which had been bombed.

The Engineer Amphibian Command—hardly more than a year old—transports combat units to the landing beaches, evacuates the wounded, and lands lightweight earth-moving equipment to make roads and distributing points. Now and then the Engineers have operated railroads. They help to lay and remove mines.

They provide for shelter and water supply and for utilities and incidental installations. No group of troops in the current Mediterranean campaign, where water supply is limited and bad, suffered for lack of water. The Chief of Engineers observed that in the meantime the essential civil works projects here at home are not being neglected.

"We continue to plan improvements of rivers, harbors and other waterways for navigation, flood control and other purposes." If another Mississippi flood were to break loose tomorrow the Engineers would be in there handling it, just as they have been in every flood in memory.

"These things are being done by the sheer guts and hard work of a young American generation," said General Reybold. "And Hitler said we were soft."

Salesmen Get Around

*Said Salesman Joe to Salesman Pete,
"You work the stores this side of the
street,*

*I'll take the others—and then we'll
meet."*

THAT'S just a jingle. But something similar to it, though perhaps not in verse, may be heard among New England salesmen nowadays. A group of them got together at the Manchester (N. H.) Chamber of Commerce recently and worked out a share-the-ride plan for themselves.

When the idea was first discussed, some of the salesmen could see the humor in what might happen if two competing salesmen rode together. As one salesman said with a grin, "I wonder if Pete would make an agreement with Joe not to discuss how many cookies he sold to Grocer Johnson?" It was taken for granted, however, that competitors would prefer not to ride together.

The Manchester Chamber supervises the plan. Drivers register at the Chamber, tell where they are going, the route, how many passengers they can take. A salesman wanting a ride to some section of the state calls the Chamber, and if someone is going to that section, the information is passed on to him.

The driver and the passengers then get together and complete arrangements. Passengers are, of course, expected to make their plans conform with those of the driver. This share-the-ride plan has been a big help to salesmen in making their rounds and has been praised by the Manchester Rationing Board.

—GLADYS V. DEANE



BD-72

● Military authorities doubt that the war will be won by any secret super weapon. They count on fighting efficiency developed out of many small things—advantages gained from foresight and painstaking attention to detail.

For example, take the BD-72 portable military switchboard developed at Connecticut, in cooperation with Signal Corps engineers. It has many features we can't tell you about, but we can say that the BD-72 was designed to save space, to get into operation faster, to stand a lot of rough usage under fighting conditions. Small things? Not if its small size permitted getting one more machine gun aboard the truck. Not if it helps "get the message thru" even seconds sooner. Small things sometimes loom large when the job is to get the jump on the enemy.

All over America, the doom of the Axis is being made more and more certain by giving the fighting men of the United Nations better fighting tools. The birth of better ways of doing things *after* the war, is an all-important by-product of this effort. Connecticut Telephone & Electric is an excellent source of ideas for developing your postwar product or manufacturing methods, if they involve communications, or the engineering and manufacture of precision electrical devices.

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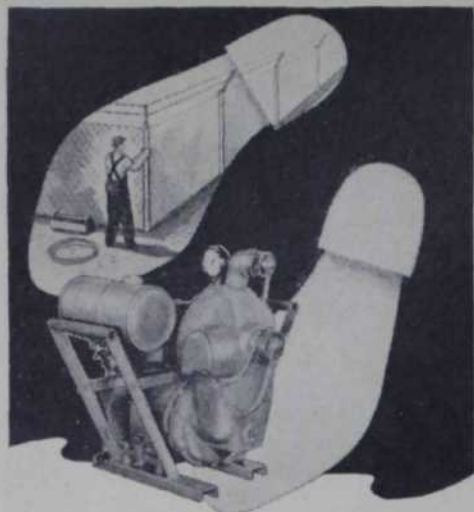


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For the second time within a year, the honor of the Army-Navy Production Award has been conferred upon the men and women of this Division.

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To Speed Reconversion

By PAUL FITZPATRICK

Administrative Vice President,
American Arbitration Association

THE TWO prime essentials for a satisfactory solution of the problem of war contract cancellation are speed and equity. Neither settlement by government bureaus nor settlement through the courts adequately meets both requirements.

An arbitrary "take it or leave it" attitude by the bureaus might conceivably be speedy if it were arbitrary enough. But the last war proved that equitable contract settlements cannot be worked out speedily and the first 4,000 cancellations of this war give a disturbing preview of what will happen when wholesale cancellations become the order of the day. In only half the cases have bureau offers been considered equitable. In the other 2,000, speedy settlement is now no longer possible—equitable settlement may have to wait upon litigation.

The termination clauses in most of the present war contracts violate a basic precept of democratic justice—"No man can be a just judge in his own cause." Equity demands the determination of contract settlement disputes by an impartial, and competent authority. But present termination clauses make the government contract officer the judge of the facts upon which claims are to be settled.

The only present alternative settlement is through litigation. In the last war it took an average of three and one-half years to reach judgment in those cases that have so far been settled. Some took 25 years (*vide* Bethlehem case settled only last fall). Some have never been settled. The judgments were undoubtedly equitable in a legal sense. No one would challenge the impartiality and competence of the Court of Claims.

Free from bottlenecks

THE one process for determining cancellation settlements both speedily and equitably is arbitration of those questions that are left in dispute after contractor and government have come to the speediest possible agreement on the remainder of the claim.

As the arbitration process is decentralized, it is free from "bottlenecks." It is focused at the points where the facts can be examined, and is completely adaptable to the infinite variety of problems that will be pre-

sented.

Speed is a basic characteristic of arbitration. So it fulfills the first requirement.

Equity as between government and contractor is in no sense different from equity as between corporation and supplier, management and labor, individual and individual. It rests, first, upon the disclosure and appraisal of all the pertinent facts. Arbitration produces the real facts—quickly and simply.

Assures impartiality

IT rests next upon the impartiality of the deciding authority. Modern arbitration methods provide assurance of the required impartiality.

And last, equity rests upon the competence of the deciding authority.

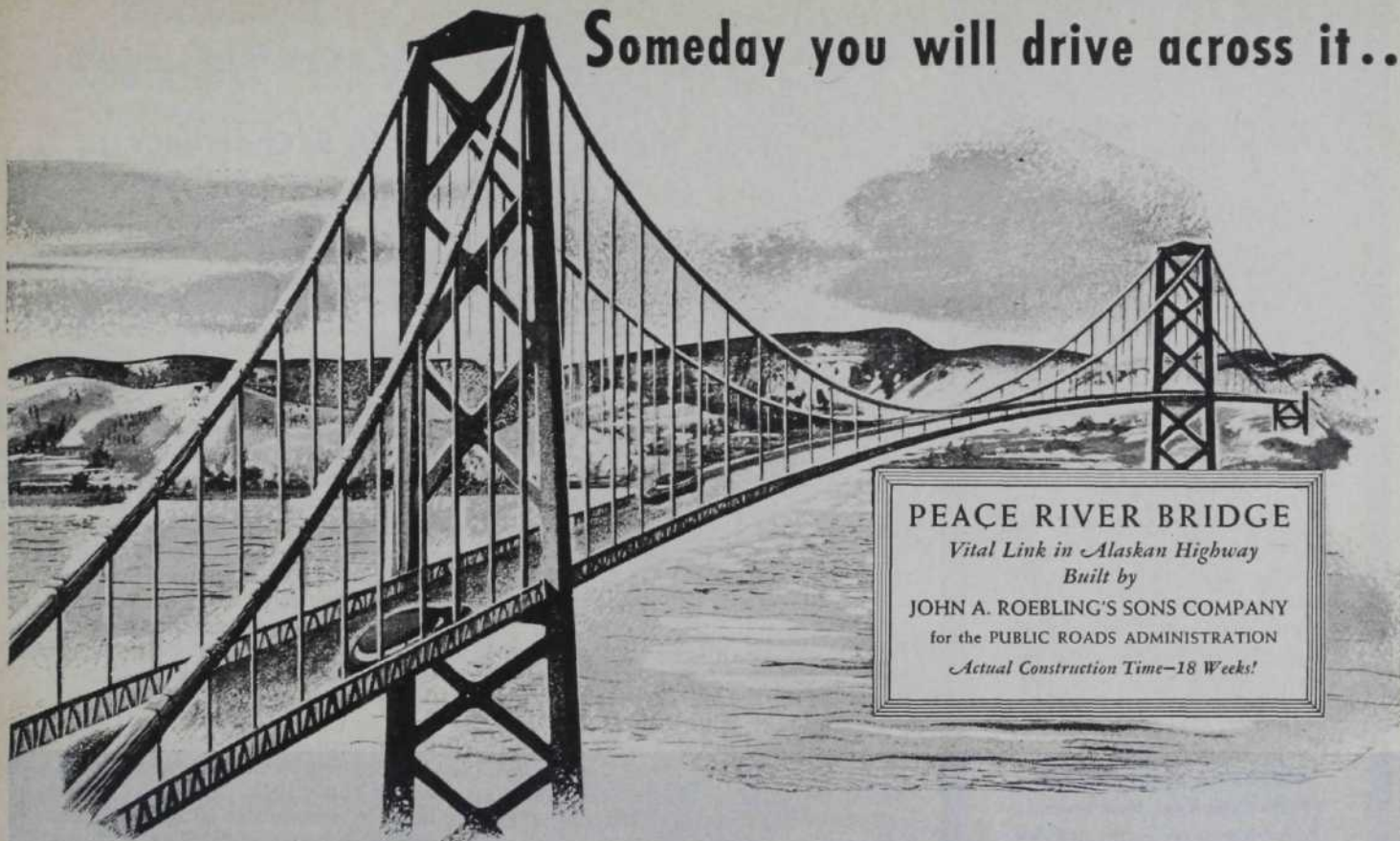
It is at this point that arbitration benefits by having available as arbitrators men of the highest competence in the particular field in which each dispute occurs.

The obvious conclusion is that legal provision should be made now to permit by agreement the inclusion of arbitration as a valid means for settling disputes between any contractors and any government agency. It is available of course between any contractor and subcontractor, and between them and their suppliers and is, in fact, being widely used.

The government procurement agencies should welcome arbitration. Industry should demand it. Labor has a vital stake in quick settlement of contract cancellations claims if employment is not to suffer through delay in reconversion. The only fields where arbitration has not been tried and proven are in the procurement contracts of the Army, Navy and Treasury Departments. Why should these Departments be denied the advantages of arbitration in arriving at speedy and equitable settlement of their honest disputes with honest claimants?

And why should industry be denied the right of access to a procedure which bears the seal of approval from the highest court in the land, from the leaders of the bar, and from the most thoughtful students of the problems created by large scale commercial relations between government and citizens?

Someday you will drive across it..



PEACE RIVER BRIDGE

*Vital Link in Alaskan Highway
Built by*

JOHN A. ROEBLING'S SONS COMPANY
for the PUBLIC ROADS ADMINISTRATION
Actual Construction Time—18 Weeks!

You're going to see the Yukon!

YOU BREAKFASTED in Dawson Creek, and now your car hums along the smooth Alaskan Highway, through the wide, pine-studded country of British Columbia. Around a curve, and suddenly, before you stretches the valley of the Peace River, spanned by one of man's most beautiful works... the suspension bridge. "Here's a bridge," you'll say to the family, "that helped to win the war."

You may stop a moment beside the bridge's approach, to tell them more about it. "That's a lot of river," you may say. "Two thousand feet wide, running 8 miles an hour! And here in the wilderness, a great bridge..."

"How ever did they get it here?" your wife asks, ever practical. "Well," you say, "it's 40 miles from rail, at Dawson Creek. They trucked it here,—100 freight car loads of material and equipment—not in balmy summer weather either. It was in the winter and spring of 1943. Bitter cold, snowing, blowing..." And before it reached Dawson Creek lay the urgent, anxious period of design, details, orders, priorities, manufacture and shipment, all compressed into the unbelievably short time of 18 weeks, an achievement made possible by the most complete co-operation between Roebling and the U. S. Public Roads Admin-

istration with the timely assistance of the U. S. Engineers when special priorities were required.

"There wasn't much here when the men arrived. Roebling carpenters built weather-tight shacks for the men. Roebling men cut wood for Roebling cooks who kept their stoves heated red. Disease struck, and at one time eighty men were down. From Trenton, medicine was packed, and flown by plane..."

"Was the river frozen?" Johnny queries.

"It was frozen fifty-four inches thick, 4½ feet of ice. So they used the ice—built their construction tower on it. Because it was the fastest way. But they gambled, for they knew the ice would thaw. The break-up would come in March. Ice unsafe after March 15 and almost certain to be dangerous by April 1. That was the report.

"They raised one bridge tower, then skidded their 100-ton construction tower across the ice to raise the other one. Just like a sled. They had to hurry. But they won.

"After the break-up, the bridge towers stood safely pointing to the sky. They needed motorboats, but there were none. They built them. The 'John A. Roebling' and the 'Washington Roebling,' named for America's bridge-

building pioneers, helped the Army ferry as they worked to build the bridge. One operation followed another in rapid succession as Roebling, working hand in hand with P. R. A. field men maintained the tempo and rushed the bridge to completion."

"This bridge was so vital," you continue, "that as soon as the cables were spun across, they carried a gasoline pipe-line over on them. Trucks shuttled to one end of it, and from the other end toward the Alaska-based bombers and fighters,—and Tokyo..."

You swing your car onto the bridge and purr along, a hundred feet above the swift Peace River. "They finished it in record time. In August, 1943..."

"Surpassing their 100 year record as bridge builders, Roebling has done a magnificent job at Peace River," says Commissioner Thomas H. McDonald of U. S. Public Roads Administration. "Construction is complete... 7½ months after the contract's signing... 18 weeks after the setting of the first piece of steel... cutting in half the best previous construction time!"

If you would like to read more of this Roebling saga, and own a color reproduction of the Peace River Bridge, write today. John A. Roebling's Sons Company, Trenton 2, New Jersey.



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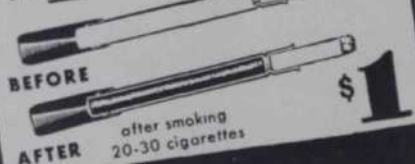
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Washington War Survey

From the Records of the U. S. Chamber's

War Service Division

Navy Production Progress—Navy Department reports completed construction of more than 6,000 naval craft of all classes during first half of 1943, 250 per cent increase over number of vessels completed during same period last year • More than 9,000 planes, including trainers and utility planes, produced for Navy in first six months of 1943; production of torpedo bombers four times as large in June, 1943, as in June, 1942 • Secretary of Navy reports new Navy "Helldiver" combat plane now in production.

★ ★ ★

Petroleum Supplies—Secretary of Interior dedicates "Big Inch" pipe line, world's largest and longest petroleum pipe line; output of line to be used primarily by Armed Forces • Bureau of Mines reports daily production of crude petroleum in May, 1943, at 3,995,000 barrels, 28,000 barrels more than April daily average, and 440,000 barrels above May, 1942.

★ ★ ★

Employment Measures—Men discharged from armed services because of disabilities, combat-incurred or otherwise, given opportunity to stay in war on production front through Veterans Employment Division of United States Employment Service, now operating in 309 Army and Navy hospitals • Civil Service Commission notifies government agencies that former federal employees discharged from military service must be restored to old jobs and be given promotions they might have had, had not military service intervened.

★ ★ ★

Selective Service—Local Selective Service Boards directed to reclassify all occupationally deferred government employees for whom no proper official deferment request has been made • Selective Service System notifies local boards that 18- or 19-year-old students in high schools or similar institutions, called for induction into Armed Forces while in last half of one of their academic years, may have induction postponed until end of academic year upon own request • Selective Service and WMC officials report completion of inventory of men still available for Armed Forces; inventory also shows 9,300,000 persons, including women, now in Armed Forces—of which 8,023,000 were furnished by Selective Service or were Selective registrants when they enlisted.

★ ★ ★

Seized Patent Licenses—Alien Property Custodian announces liberalized

terms for issuance of licenses to American business under patents seized from enemy owners.

★ ★ ★

Rationing—Farmers needing fuel oil for incubators, brooders and other equipment used in raising poultry, livestock and agricultural products may secure necessary rations regardless of date of acquisition of equipment, says OPA • WPB Chairman announces six-point clothing program designed to eliminate necessity for rationing • OPA prohibits rationing of new, used, or recapped tires for spares during next few months except to firemen, doctors and certain others who may need to drive fast.

★ ★ ★

Lend-Lease High Mark—Lend Lease Administrator reports that Lend-Lease aid in June, 1943, totaled \$1,030,000,000, largest amount in single month since establishment; munitions, \$570,000,000; industrial items, \$237,000,000; foodstuffs, \$147,000,000; services, \$76,000,000.

★ ★ ★

Conservation—Office of Defense Transportation approves five joint-action plans of motor common carriers in Missouri, Kansas, Illinois and Oklahoma; estimated to save 747,000 truck miles annually • WPB Chemicals Division estimates savings of 150,000,000 ton-miles of chemical tank car transportation during first three months of operation of General Haulage Conservation Order • Cancellation of conventions and similar group meetings, as measure to avert rationing of passenger travel, urged by ODT • WPB establishes national reserve pool of used idle resistance welding equipment by requiring owners to register such equipment • Navy reports use of plastic ship-bottom paint which reduces fouling of warships and effects large savings in fuel, strain on machinery, and reduces docking facilities needed for cleaning and painting ship bottoms.

★ ★ ★

Curtailment of Construction Projects—WPB halts non-industrial construction projects, having total cost of \$15,338,390, as part of cut-back program.

★ ★ ★

Increasing Food Production—War Food Administrator announces 1944 farm program calling for increase of 16,000,000 acres in crops and emphasizing meat, egg and dairy production; goal of 380,000,000 acres, largest ever put into production.

—E. L. BACHER

Dixieland Goes to Town

(Continued from page 24)

stories that have risen, Aladdin-like, from cotton fields and wooded slopes.

Getting a glimpse of this South is like looking into a vast new treasure chest.

Maps on the walls of Washington offices showing the location of strategic establishments, prove graphically that the South has fared as well as any part of the nation, considering its population and potentials. As one manpower statistician remarked:

"If the South had any more plants now, we would have to import labor."

As an example, the map on the wall at Defense Plants Corporation shows that every one of the 62 primary air schools built by this agency and operated by private companies is below the Mason-Dixon Line, at the Army's request. Industrialists are learning that they can service new pay rolls in new places through regional, rather than central, manufacturing.

Postwar resources

AS THE Dallas Chamber of Commerce points out:

"Before the war, industry showed a growing tendency to decentralize. That such a trend will dominate the postwar program of reconverting to peacetime production is apparent.

"Huge war industries have been located in districts heretofore largely agricultural. They have trained thousands of workers new to industry, created large new power resources, discovered and developed important new sources of raw materials, caused considerable shifting of population. More important, they have demonstrated again and again that production costs are no higher, and frequently much lower, than in the long-established industrial centers. Alert industrialists . . . are planning now for the major readjustments that must come in industry with the return of production to peacetime needs."

Southern business men realize that the South still has social, economic and physical ills, but they know also one important fact:

The South today has what it did not once have—productive facilities, skilled workers, and indomitable will to stay strong, even in peace.

Postwar readjustments are not likely to daunt the South. It will be prepared for them. Even when it was not prepared, it managed to look at the bright side of its difficulties. When the boll weevil was eating its way through the southern cotton crop, many people could see only the resulting hardship. The South had a broader vision.

In the little town of Enterprise, Alabama, they built a monument to the boll weevil in gratitude for the lesson of diversion it had forced them to learn.



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In Plomb's complete line of supreme quality hand tools for all industries, the socket and attachment group alone includes hundreds of kinds and sizes. Equally complete—equally outstanding in quality—are all other types of tools that bear the famous Plomb name.

Their excellence has made them the choice of professional mechanics—has resulted in such gigantic demand that 36 separate factories operate night and day to fill war needs. Thus, Plomb tools in ever-increasing volume are available thru dependable dealers all over the country to help make weapons faster and better—and to maintain those weapons at peak efficiency.

In addition, if you need special tools for special war needs consult Plomb. And remember, for regular tools call the Plomb dealer in your neighborhood.

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LOS ANGELES 7 CALIFORNIA



Weather Permitting

THE effective range of the time-honored wig-wag system of flag signalling is limited by weather conditions — is reduced to zero during heavy rains, fog, or at night. The effects of natural interference are felt, too, even in radio communication, when static from unshielded ignition and secondary electrical circuits interrupt reception. Breeze Radio Ignition Shielding, a product of years of Breeze design and manufacture, makes it possible to overcome this evil, and insures static-free and dependable transmission and reception of messages. Produced in many sizes to designers' specifications, this Shielding is in use today on aircraft, tanks, and PT boats of the U. S. Army, Navy, and Air Forces. Used in conjunction with Breeze Flexible Conduit and Fittings, assemblies can be fabricated to meet the requirements of any shielding problem.

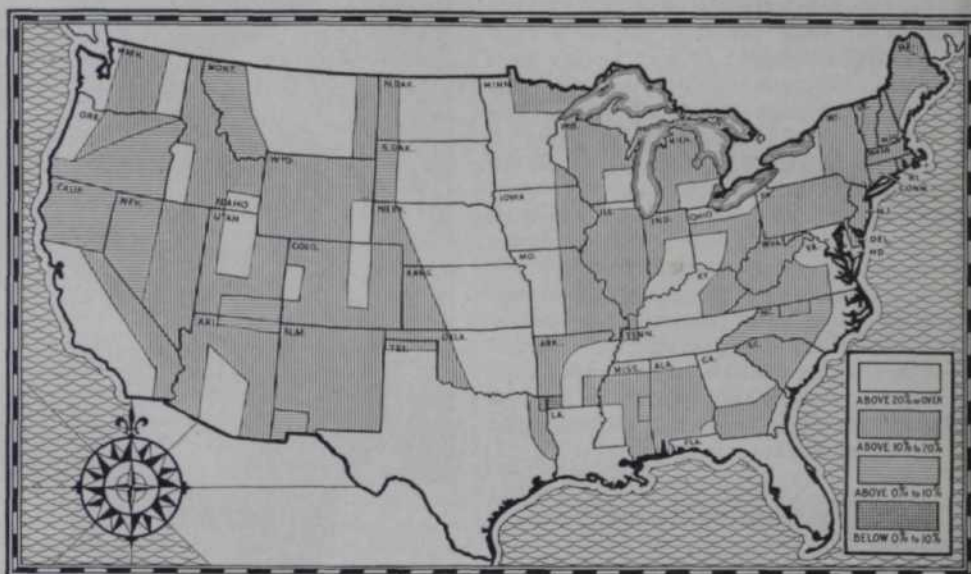


Breeze

CORPORATIONS, INC., NEWARK, N. J.

The Map of the Nation's Business

By FRANK GREENE



INDUSTRIAL output pushed forward in July as the country adjusted itself to the shifting processes of the war production program. With the ending of the coal strikes, bituminous coal production recovered briskly, while steel output in the last half of July went slightly above 98 per cent of rated capacity, highest since the end of May. Electric power output again reached an all-time high, with aircraft and shipbuilding industries maintaining record production schedules. Increased freight carloadings reflected seasonal grain movements and return to normal coal shipments, while improved transportation facilities eased tension in eastern petroleum supplies. Lumber production continued to lag as declining military and naval building brought engineering construction awards far below year ago levels.

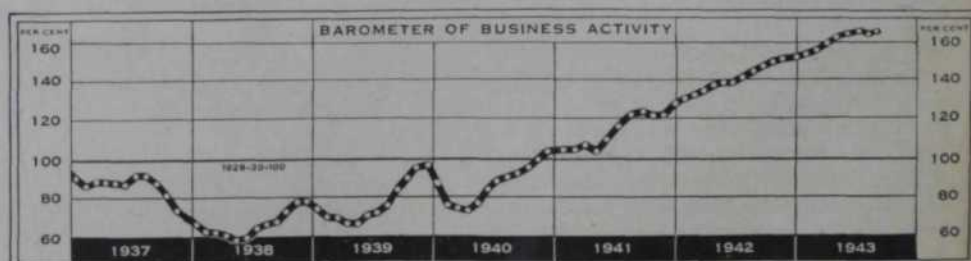
The latter half of the month wit-

With war industries and agricultural income maintained at peak levels, the Map retains its bright hue.



The map of last month

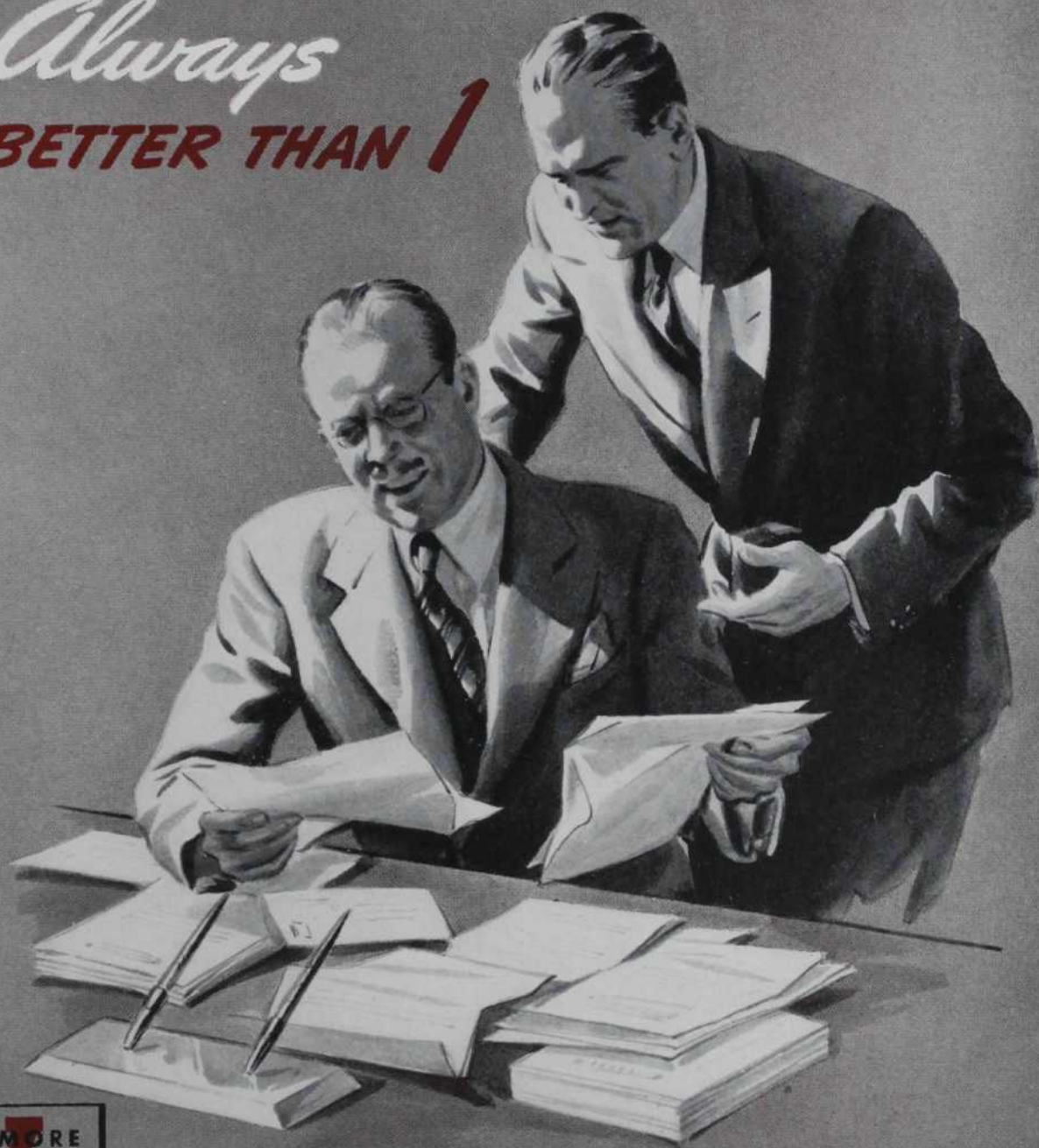
nessed the year's sharpest break in stock prices, accompanied by marked activity in trading, while agricultural prices continued the mild downtrend recorded in June. Retail sales volume held up well.



Dominated by shifting military requirements, production in most lines remained at capacity volume in July and the Barometer moved slightly upward.

NATION'S BUSINESS for September, 1943

2 HEADS ARE
Always
BETTER THAN 1



BUY MORE
V
WAR BONDS

"You've Got to Spend Money to Make Money"

GEORGE S. MAY COMPANY

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May Building
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CANADA: 320 Bay St., Toronto

NEW YORK
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122 East 42nd Street

OFFICES IN PRINCIPAL CITIES

★ ★ THEY'VE GOT WHAT IT TAKES! ★ ★

12 times across the ocean in 13 days!

That's the record set by
Captain Joseph H. Hart in flying vital
war cargo abroad!

HE'S FLOWN tons of freight, hundreds of United Nations officials across the Atlantic—and recently, Captain Joseph H. Hart, one of Pan American Airways' ace pilots, broke his own record... flew 12 times across the ocean in 13 days, 15 hours! He's a former Army pilot... and a Camel smoker for 20 years. "For steady smoking pleasure," says Captain Hart, "I'll take Camels." And Captain Hart's choice is echoed by millions of smokers who have found, that in mildness and in flavor, Camels have *what it takes*.

I STICK TO
CAMELS.
THEY'VE GOT
MORE **FLAVOR**—
AND THEY'RE
EASY ON
MY **THROAT**



ANOTHER PRECIOUS LOAD of war freight is loaded aboard Captain Hart's Pan American Clipper. He's flown everything from engines to generals. Camel cigarettes have flown many a mile with him, too, for "Camels are standard equipment with me," says Captain Hart.



First in the Service

With men in the Army, Navy, Marine Corps, and Coast Guard, the favorite cigarette is Camel.

(Based on actual sales records in Post Exchanges and Canteens.)

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.



Camels



The "T Zone"

—where cigarettes are judged

The "T-ZONE"—Taste and Throat—is the proving ground for cigarettes. Only *your* taste and throat can decide which cigarette tastes best to you... and how it affects your throat. Based on the experience of millions of smokers, we believe Camels will suit your "T-ZONE" to a "T." Prove it for yourself.

